

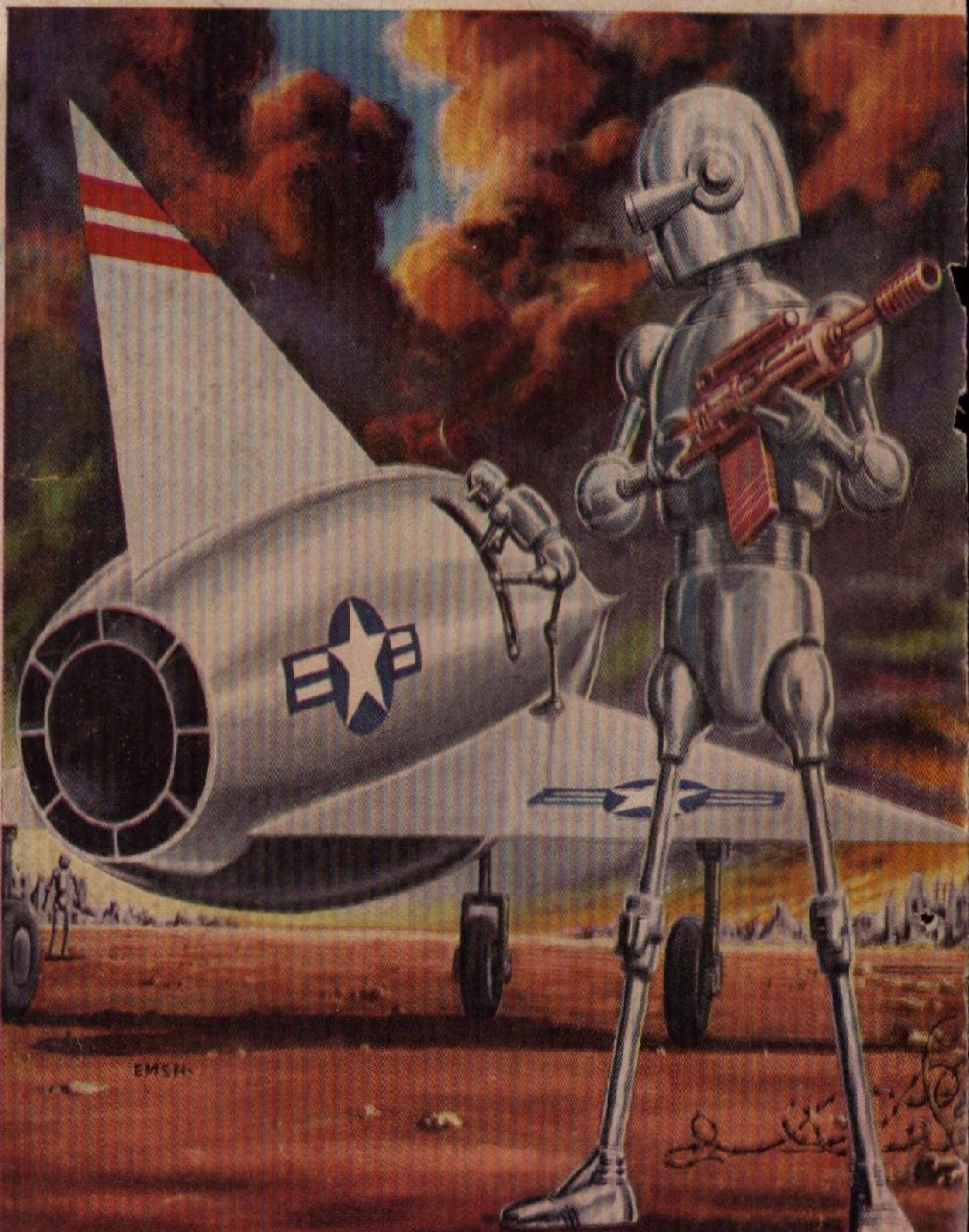
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JANUARY 1953

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THE DEFENDERS By Philip K. Dick

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ROBERT GUINN, Publisher

H. L. GOLD, Editor

WILLY LEY, Science Editor

EVELYN PAIGE, Assistant Editor

W. I. VAN DER POEL, Art Director

JOAN De MARIO, Production Manager

GALAXY *Science Fiction* is published monthly by Galaxy Publishing Corporation. Main offices: 421 Hudson Street, New York 14, N. Y. 35c per copy. Subscriptions: (12 copies) \$3.50 per year in the United States, Canada, Mexico, South and Central America and U.S. Possessions. Elsewhere \$4.50. Entered as second-class matter at the Post Office, New York, N. Y. Copyright, 1952, by Galaxy Publishing Corporation. Robert Guinn, president. All rights, including translation, reserved. All material submitted must be accompanied by self-addressed stamped envelopes. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction, and any similarity between characters and actual persons is coincidental.

COMMON SENSE

YOU might say that humanity's slogan is: "The obvious we see eventually; the completely apparent takes a little longer."

Each of us buys his share of plausible irrationality, provided it's repeated often enough to be considered axiomatic.

For centuries, as an example, nobody thought of testing Aristotle's statement that the heavier the object, the faster it falls. Common sense told them Aristotle was right. But Galileo tried it out with vari-sized rocks from the top of the Tower of Pisa and found that the rate of fall is constant, regardless of weight. We all know now that a feather and a lump of lead exactly match speeds in a vacuum, but we know it only because one man was silly enough to disregard logic and try it out in practice.

That sort of stubborn insistence on challenging the obvious is the difference between progress and paralysis. Here are some items that anyone with any intelligence at all can see are true, but I don't:

We're faced with inflation.

A rising cost of living, yes, but is it inflation? The word is flung around with no attempt to define it. Inflation is a sudden and disastrous gap between the cost of living and income. If in-

come keeps pace with rising prices, the result is a decline in the purchasing power of money, but it's not inflation.

Remember Mark Twain's *A Connecticut Yankee in King Arthur's Court*? The people of that time were astonished by the prediction that wages in the 19th Century would be as much as \$5 to \$10 a week, which was thousands of times more than they earned. Today's prices and wages would have startled Mark Twain as much as he amazed his characters. Yet he knew the economic law behind them—regardless of depressions, the trend of prices and wages is a constant incline.

It doesn't matter whether steak costs 10c or \$1000 a pound. If wages are \$1000 a week, it won't stay at 10c a pound. If they're 10c an hour, \$1000 a pound is cataclysmic. But 10c an hour and 10c a pound and \$1000 an hour and \$1000 a pound are equal.

So as long as prices and income remain approximately proportionate, inflation is no menace.

Criminals have distinct physical characteristics, and a genius must be insane.

Both of these propositions were offered by Cesare Lombroso, who died in 1909, while his obviously demonstrable—and wholly cock-

(Continued on page 95)

TAYLOR sat back in his chair reading the morning newspaper. The warm kitchen and the smell of coffee blended with the comfort of not having to go to work. This was his Rest Period, the first for a long time, and he was glad of it. He folded the second section back, sighing with contentment.

"What is it?" Mary said, from the stove.

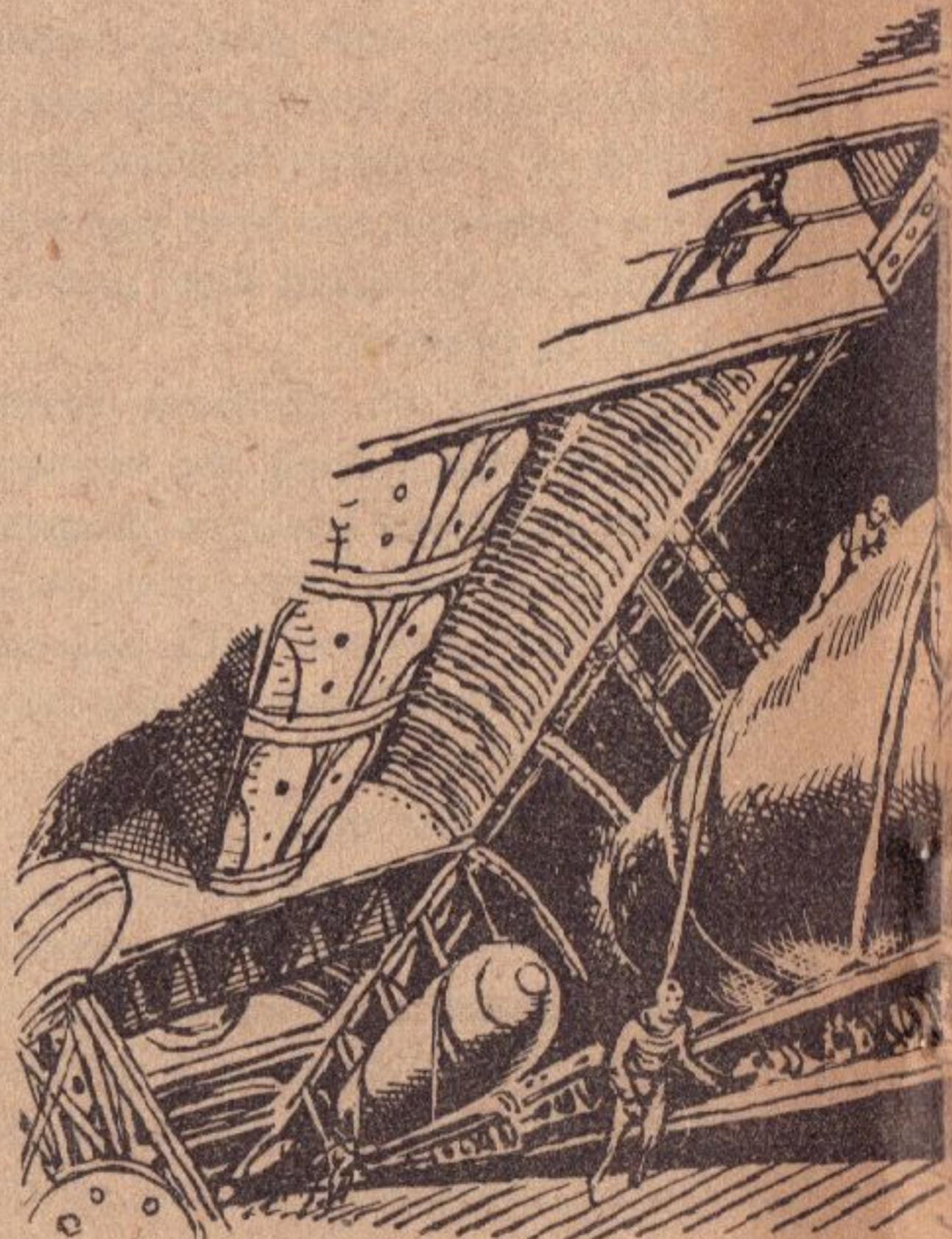
"They pasted Moscow again last night." Taylor nodded his head in approval. "Gave it a real pounding. One of those R-H bombs. It's about time."

He nodded again, feeling the full comfort of the kitchen, the presence of his plump, attractive wife, the breakfast dishes and coffee. This was relaxation. And the war news was good, good and satisfying. He could feel a justifiable glow at the news, a sense of pride and personal accomplishment. After all, he was an integral part of the war program, not just another factory worker lugging a cart of scrap, but a technician, one of those who designed and planned the nerve-trunk of the war.

"It says they have the new subs almost perfected. Wait until they get those going." He smacked his lips with anticipation. "When they start shelling from underwater, the Soviets are sure going to be surprised."

The Defenders

No weapon
has ever been frightful enough
to put a stop to war
—perhaps because
we never before had any
that thought
for themselves!



By PHILIP K. DICK

Illustrated by EMSH



"They're doing a wonderful job," Mary agreed vaguely. "Do you know what we saw today? Our team is getting a ready to show to the school children. I saw the ready, but only for a moment. It's good for the children to see what their contributions are going for, don't you think?"

She looked around at him.

"A ready," Taylor murmured. He put the newspaper slowly down. "Well, make sure it's de-contaminated properly. We don't want to take any chances."

"Oh, they always bathe them when they're brought down from the surface," Mary said. "They wouldn't think of letting them down without the bath. Would they?" She hesitated, thinking back. "Don, you know, it makes me remember—"

He nodded. "I know."

HE knew what she was thinking. Once in the very first weeks of the war, before everyone had been evacuated from the surface, they had seen a hospital train discharging the wounded, people who had been showered with sleet. He remembered the way they had looked, the expression on their faces, or as much of their faces as was left. It had not been a pleasant sight.

There had been a lot of that at first, in the early days before

the transfer to undersurface was complete. There had been a lot, and it hadn't been very difficult to come across it.

Taylor looked up at his wife. She was thinking too much about it, the last few months. They all were.

"Forget it," he said. "It's all in the past. There isn't anybody up there now but the leadys, and they don't mind."

"But just the same, I hope they're careful when they let one of them down here. If one were still hot—"

He laughed, pushing himself away from the table. "Forget it. This is a wonderful moment; I'll be home for the next two shifts. Nothing to do but sit around and take things easy. Maybe we can take in a show. Okay?"

"A show? Do we have to? I don't like to look at all the destruction, the ruins. Sometimes I see some place I remember, like San Francisco. They showed a shot of San Francisco, the bridge broken and fallen in the water, and I got upset. I don't like to watch."

"But don't you want to know what's going on? No human beings are getting hurt, you know."

"But it's so awful!" Her face was set and strained. "Please, no, Don."

Don Taylor picked up his newspaper sullenly. "All right,

but there isn't a hell of a lot else to do. And don't forget, *their* cities are getting it even worse."

She nodded. Taylor turned the rough, thin sheets of newspaper. His good mood had soured on him. Why did she have to fret all the time? They were pretty well off, as things went. You couldn't expect to have everything perfect, living undersurface, with an artificial sun and artificial food. Naturally it was a strain, not seeing the sky or being able to go any place or see anything other than metal walls, great roaring factories, the plant-yards, barracks. But it was better than being on surface. And some day it would end and they could return. Nobody *wanted* to live this way, but it was necessary.

He turned the page angrily and the poor paper ripped. Damn it, the paper was getting worse quality all the time, bad print, yellow tint—

Well, they needed everything for the war program. He ought to know that. Wasn't he one of the planners?

He excused himself and went into the other room. The bed was still unmade. They had better get it in shape before the seventh hour inspection. There was a one unit fine—

The vidphone rang. He halted. Who would it be? He went over and clicked it on.

"Taylor?" the face said, forming into place. It was an old face, gray and grim. "This is Moss. I'm sorry to bother you during Rest Period, but this thing has come up." He rattled papers. "I want you to hurry over here."

Taylor stiffened. "What is it? There's no chance it could wait?" The calm gray eyes were studying him, expressionless, unjudging. "If you want me to come down to the lab," Taylor grumbled, "I suppose I can. I'll get my uniform—"

"No. Come as you are. And not to the lab. Meet me at second stage as soon as possible. It'll take you about a half hour, using the fast car up. I'll see you there."

The picture broke and Moss disappeared.

"**W**HAT was it?" Mary said, at the door.

"Moss. He wants me for something."

"I knew this would happen."

"Well, you didn't want to do anything, anyhow. What does it matter?" His voice was bitter. "It's all the same, every day. I'll bring you back something. I'm going up to second stage. Maybe I'll be close enough to the surface to—"

"Don't! Don't bring me anything! Not from the surface!"

"All right, I won't. But of all the irrational nonsense—"

She watched him put on his boots without answering.

MOSS nodded and Taylor fell in step with him, as the older man strode along. A series of loads were going up to the surface, blind cars clanking like ore-trucks up the ramp, disappearing through the stage trap above them. Taylor watched the cars, heavy with tubular machinery of some sort, weapons new to him. Workers were everywhere, in the dark gray uniforms of the labor corps, loading, lifting, shouting back and forth. The stage was deafening with noise.

"We'll go up a way," Moss said, "where we can talk. This is no place to give you details."

They took an escalator up. The commercial lift fell behind them, and with it most of the crashing and booming. Soon they emerged on an observation platform, suspended on the side of the Tube, the vast tunnel leading to the surface, not more than half a mile above them now.

"My God!" Taylor said, looking down the Tube involuntarily. "It's a long way down."

Moss laughed. "Don't look."

They opened a door and entered an office. Behind the desk, an officer was sitting, an officer of Internal Security. He looked up.

"I'll be right with you, Moss."

He gazed at Taylor studying him. "You're a little ahead of time."

"This is Commander Franks," Moss said to Taylor. "He was the first to make the discovery. I was notified last night." He tapped a parcel he carried. "I was let in because of this."

Franks frowned at him and stood up. "We're going up to first stage. We can discuss it there."

"First stage?" Taylor repeated nervously. The three of them went down a side passage to a small lift. "I've never been up there. Is it all right? It's not radioactive, is it?"

"You're like everyone else," Franks said. "Old women afraid of burglars. No radiation leaks down to first stage. There's lead and rock, and what comes down the Tube is bathed."

"What's the nature of the problem?" Taylor asked. "I'd like to know something about it."

"In a moment."

They entered the lift and ascended. When they stepped out, they were in a hall of soldiers, weapons and uniforms everywhere. Taylor blinked in surprise. So this was first stage, the closest undersurface level to the top! After this stage there was only rock, lead and rock, and the great tubes leading up like the burrows of earthworms. Lead and rock, and above that, where

the tubes opened, the great expanse that no living being had seen for eight years, the vast, endless ruin that had once been Man's home, the place where he had lived, eight years ago.

Now the surface was a lethal desert of slag and rolling clouds. Endless clouds drifted back and forth, blotting out the red Sun. Occasionally something metallic stirred, moving through the remains of a city, threading its way across the tortured terrain of the countryside. A leady, a surface robot, immune to radiation, constructed with feverish haste in the last months before the cold war became literally hot.

Leadys, crawling along the ground, moving over the oceans or through the skies in slender, blackened craft, creatures that could exist where no *life* could remain, metal and plastic figures that waged a war Man had conceived, but which he could not fight himself. Human beings had invented war, invented and manufactured the weapons, even invented the players, the fighters, the actors of the war. But they themselves could not venture forth, could not wage it themselves. In all the world—in Russia, in Europe, America, Africa—no living human being remained. They were under the surface, in the deep shelters that had been carefully planned and

built, even as the first bombs began to fall.

It was a brilliant idea and the only idea that could have worked. Up above, on the ruined, blasted surface of what had once been a living planet, the leadys crawled and scurried, and fought Man's war. And undersurface, in the depths of the planet, human beings toiled endlessly to produce the weapons to continue the fight, month by month, year by year.

FIRST stage," Taylor said. A strange ache went through him. "Almost to the surface."

"But not quite," Moss said.

Franks led them through the soldiers, over to one side, near the lip of the Tube.

"In a few minutes, a lift will bring something down to us from the surface," he explained. "You see, Taylor, every once in a while Security examines and interrogates a surface leady, one that has been above for a time, to find out certain things. A vid-call is sent up and contact is made with a field headquarters. We need this direct interview; we can't depend on vidscreen contact alone. The leadys are doing a good job, but we want to make certain that everything is going the way we want it."

Franks faced Taylor and Moss and continued: "The lift will

bring down a leady from the surface, one of the A-class leadys. There's an examination chamber in the next room, with a lead wall in the center, so the interviewing officers won't be exposed to radiation. We find this easier than bathing the leady. It is going right back up; it has a job to get back to.

"Two days ago, an A-class leady was brought down and interrogated. I conducted the session myself. We were interested in a new weapon the Soviets have been using, an automatic mine that pursues anything that moves. Military had sent instructions up that the mine be observed and reported in detail.

"This A-class leady was brought down with information. We learned a few facts from it, obtained the usual roll of film and reports, and then sent it back up. It was going out of the chamber, back to the lift, when a curious thing happened. At the time, I thought—"

Franks broke off. A red light was flashing.

"That down lift is coming." He nodded to some soldiers. "Let's enter the chamber. The leady will be along in a moment."

"An A-class leady," Taylor said. "I've seen them on the showscreens, making their reports."

"It's quite an experience,"

Moss said. "They're almost human."

THEY entered the chamber and seated themselves behind the lead wall. After a time, a signal was flashed, and Franks made a motion with his hands.

The door beyond the wall opened. Taylor peered through his view slot. He saw something advancing slowly, a slender metallic figure moving on a tread, its arm grips at rest by its sides. The figure halted and scanned the lead wall. It stood, waiting.

"We are interested in learning something," Franks said. "Before I question you, do you have anything to report on surface conditions?"

"No. The war continues." The leady's voice was automatic and toneless. "We are a little short of fast pursuit craft, the single-seat type. We could use also some—"

"That has all been noted. What I want to ask you is this. Our contact with you has been through vidscreen only. We must rely on indirect evidence, since none of us goes above. We can only infer what is going on. We never see anything ourselves. We have to take it all secondhand. Some top leaders are beginning to think there's too much room for error."

"Error?" the leady asked. "In

what way? Our reports are checked carefully before they're sent down. We maintain constant contact with you; everything of value is reported. Any new weapons which the enemy is seen to employ—”

“I realize that,” Franks grunted behind his peep slot. “But perhaps we should see it all for ourselves. Is it possible that there might be a large enough radiation-free area for a human party to ascend to the surface? If a few of us were to come up in lead-lined suits, would we be able to survive long enough to observe conditions and watch things?”

The machine hesitated before answering. “I doubt it. You can check air samples, of course, and decide for yourselves. But in the eight years since you left, things have continually worsened. You cannot have any real idea of conditions up there. It has become difficult for any moving object to survive for long. There are many kinds of projectiles sensitive to movement. The new mine not only reacts to motion, but continues to pursue the object indefinitely, until it finally reaches it. And the radiation is everywhere.”

“I see.” Franks turned to Moss, his eyes narrowed oddly. “Well, that was what I wanted to know. You may go.”

The machine moved back to-

ward its exit. It paused. “Each month the amount of lethal particles in the atmosphere increases. The tempo of the war is gradually—”

“I understand.” Franks rose. He held out his hand and Moss passed him the package. “One thing before you leave. I want you to examine a new type of metal shield material. I’ll pass you a sample with the tong.”

Franks put the package in the toothed grip and revolved the tong so that he held the other end. The package swung down to the leady, which took it. They watched it unwrap the package and take the metal plate in its hands. The leady turned the metal over and over.

Suddenly it became rigid.

“All right,” Franks said.

He put his shoulder against the wall and a section slid aside. Taylor gasped—Franks and Moss were hurrying up to the leady!

“Good God!” Taylor said. “But it’s radioactive!”

THE leady stood unmoving, still holding the metal. Soldiers appeared in the chamber. They surrounded the leady and ran a counter across it carefully.

“Okay, sir,” one of them said to Franks. “It’s as cold as a long winter evening.”

“Good. I was sure, but I didn’t want to take any chances.”

"You see," Moss said to Taylor, "this leady isn't hot at all. Yet it came directly from the surface, without even being bathed."

"But what does it mean?" Taylor asked blankly.

"It may be an accident," Franks said. "There's always the possibility that a given object might escape being exposed above. But this is the second time it's happened that we know of. There may be others."

"The second time?"

"The previous interview was when we noticed it. The leady was not hot. It was cold, too, like this one."

Moss took back the metal plate from the leady's hands. He pressed the surface carefully and returned it to the stiff, unprotesting fingers.

"We shorted it out with this, so we could get close enough for a thorough check. It'll come back on in a second now. We had better get behind the wall again."

They walked back and the lead wall swung closed behind them. The soldiers left the chamber.

"Two periods from now," Franks said softly, "an initial investigating party will be ready to go surface-side. We're going up the Tube in suits, up to the top—the first human party to leave undersurface in eight years."

"It may mean nothing," Moss said, "but I doubt it. Something's going on, something strange. The leady told us no life could exist above without being roasted. The story doesn't fit."

Taylor nodded. He stared through the peep slot at the immobile metal figure. Already the leady was beginning to stir. It was bent in several places, dented and twisted, and its finish was blackened and charred. It was a leady that had been up there a long time; it had seen war and destruction, ruin so vast that no human being could imagine the extent. It had crawled and slunk in a world of radiation and death, a world where no life could exist.

And Taylor had touched it!

"You're going with us," Franks said suddenly. "I want you along. I think the three of us will go."

MARY faced him with a sick and frightened expression. "I know it. You're going to the surface. Aren't you?"

She followed him into the kitchen. Taylor sat down, looking away from her.

"It's a classified project," he evaded. "I can't tell you anything about it."

"You don't have to tell me. I know. I knew it the moment you came in. There was something on your face, something I haven't seen there for a long, long time."

It was an old look."

She came toward him. "But how can they send you to the surface?" She took his face in her shaking hands, making him look at her. There was a strange hunger in her eyes. "Nobody can live up there. Look, look at this!"

She grabbed up a newspaper and held it in front of him.

"Look at this photograph. America, Europe, Asia, Africa—nothing but ruins. We've seen it every day on the showscreens. All destroyed, poisoned. And they're sending you up. Why? No living thing can get by up there, not even a weed, or grass. They've wrecked the surface, haven't they? *Haven't they?*"

Taylor stood up. "It's an order. I know nothing about it. I was told to report to join a scout party. That's all I know."

He stood for a long time, staring ahead. Slowly, he reached for the newspaper and held it up to the light.

"It looks real," he murmured. "Ruins, deadness, slag. It's convincing. All the reports, photographs, films, even air samples. Yet we haven't seen it for ourselves, not after the first months . . ."

"What are you talking about?"

"Nothing." He put the paper down. "I'm leaving early after the next Sleep Period. Let's turn in."

Mary turned away, her face hard and harsh. "Do what you want. We might just as well all go up and get killed at once, instead of dying slowly down here, like vermin in the ground."

He had not realized how resentful she was. Were they all like that? How about the workers toiling in the factories, day and night, endlessly? The pale, stooped men and women, plodding back and forth to work, blinking in the colorless light, eating synthetics—

"You shouldn't be so bitter," he said.

Mary smiled a little. "I'm bitter because I know you'll never come back." She turned away. "I'll never see you again, once you go up there."

He was shocked. "What? How can you say a thing like that?"

She did not answer.

HE awakened with the public newscaster screeching in his ears, shouting outside the building.

"Special news bulletin! Surface forces report enormous Soviets attack with new weapons! Retreat of key groups! All work units report to factories at once!"

Taylor blinked, rubbing his eyes. He jumped out of bed and hurried to the vidphone. A moment later he was put through to Moss.

"Listen," he said. "What about this new attack? Is the project off?" He could see Moss's desk, covered with reports and papers.

"No," Moss said. "We're going right ahead. Get over here at once."

"But—"

"Don't argue with me." Moss held up a handful of surface bulletins, crumpling them savagely. "This is a fake. Come on!" He broke off.

Taylor dressed furiously, his mind in a daze.

Half an hour later, he leaped from a fast car and hurried up the stairs into the Synthetics Building. The corridors were full of men and women rushing in every direction. He entered Moss's office.

"There you are," Moss said, getting up immediately. "Franks is waiting for us at the outgoing station."

They went in a Security Car, the siren screaming. Workers scattered out of their way.

"What about the attack?" Taylor asked.

Moss braced his shoulders. "We're certain that we've forced their hand. We've brought the issue to a head."

They pulled up at the station link of the Tube and leaped out. A moment later they were moving up at high speed toward the first stage.

They emerged into a bewildering scene of activity. Soldiers were fastening on lead suits, talking excitedly to each other, shouting back and forth. Guns were being given out, instructions passed.

Taylor studied one of the soldiers. He was armed with the dreaded Bender pistol, the new snub-nosed hand weapon that was just beginning to come from the assembly line. Some of the soldiers looked a little frightened.

"I hope we're not making a mistake," Moss said, noticing his gaze.

Franks came toward them. "Here's the program. The three of us are going up first, alone. The soldiers will follow in fifteen minutes."

"What are we going to tell the leadys?" Taylor worriedly asked. "We'll have to tell them something."

"We want to observe the new Soviet attack." Franks smiled ironically. "Since it seems to be so serious, we should be there in person to witness it."

"And then what?" Taylor said.

"That'll be up to them. Let's go."

IN a small car, they went swiftly up the Tube, carried by anti-grav beams from below. Taylor glanced down from time to time. It was a long way back,

and getting longer each moment. He sweated nervously inside his suit, gripping his Bender pistol with inexpert fingers.

Why had they chosen him? Chance, pure chance. Moss had asked him to come along as a Department member. Then Franks had picked him out on the spur of the moment. And now they were rushing toward the surface, faster and faster.

A deep fear, instilled in him for eight years, throbbed in his mind. Radiation, certain death, a world blasted and lethal—

Up and up the car went. Taylor gripped the sides and closed his eyes. Each moment they were closer, the first living creatures to go above the first stage, up the Tube past the lead and rock, up to the surface. The phobic horror shook him in waves. It was death; they all knew that. Hadn't they seen it in the films a thousand times? The cities, the sleet coming down, the rolling clouds—

"It won't be much longer," Franks said. "We're almost there. The surface tower is not expecting us. I gave orders that no signal was to be sent."

The car shot up, rushing furiously. Taylor's head spun; he hung on, his eyes shut. Up and up. . . .

The car stopped. He opened his eyes.

They were in a vast room, fluorescent-lit, a cavern filled with equipment and machinery, endless mounds of material piled in row after row. Among the stacks, leadys were working silently, pushing trucks and handcarts.

"Leadys," Moss said. His face was pale. "Then we're really on the surface."

The leadys were going back and forth with equipment moving the vast stores of guns and spare parts, ammunition and supplies that had been brought to the surface. And this was the receiving station for only one Tube; there were many others, scattered throughout the continent.

Taylor looked nervously around him. They were really there, above ground, on the surface. This was where the war was.

"Come on," Franks said. "A B-class guard is coming our way."

THEY stepped out of the car. A ready was approaching them rapidly. It coasted up in front of them and stopped scanning them with its hand-weapon raised.

"This is Security," Franks said. "Have an A-class sent to me at once."

The ready hesitated. Other B-class guards were coming, scooting across the floor, alert and

alarmed. Moss peered around.

"Obey!" Franks said in a loud, commanding voice. "You've been ordered!"

The leadys moved uncertainly away from them. At the end of the building, a door slid back. Two Class-A leadys appeared, coming slowly toward them. Each had a green stripe across its front.

"From the Surface Council," Franks whispered tensely. "This is above ground, all right. Get set."

The two leadys approached warily. Without speaking, they stopped close by the men, looking them up and down.

"I'm Franks of Security. We came from undersurface in order to—"

"This is incredible," one leadys interrupted him coldly. "You know you can't live up here. The whole surface is lethal to you. You can't possibly remain on the surface."

"These suits will protect us," Franks said. "In any case, it's not your responsibility. What I want is an immediate Council meeting so I can acquaint myself with conditions, with the situation here. Can that be arranged?"

"You human beings can't survive up here. And the new Soviet attack is directed at this area. It is in considerable danger."

"We know that. Please assem-

ble the Council." Franks looked around him at the vast room, lit by recessed lamps in the ceiling. An uncertain quality came into his voice. "Is it night or day right now?"

"Night," one of the A-class leadys said, after a pause. "Dawn is coming in about two hours."

Franks nodded. "We'll remain at least two hours, then. As a concession to our sentimentality, would you please show us some place where we can observe the Sun as it comes up? We would appreciate it."

A stir went through the leadys.

"It is an unpleasant sight," one of the leadys said. "You've seen the photographs; you know what you'll witness. Clouds of drifting particles blot out the light, slag heaps are everywhere, the whole land is destroyed. For you it will be a staggering sight, much worse than pictures and film can convey."

"However it may be, we'll stay long enough to see it. Will you give the order to the Council?"

"COME this way." Reluctantly, the two leadys coasted toward the wall of the warehouse. The three men trudged after them, their heavy shoes ringing against the concrete. At the wall, the two leadys paused.

"This is the entrance to the Council Chamber. There are

windows in the Chamber Room, but it is still dark outside, of course. You'll see nothing right now, but in two hours—”

“Open the door,” Franks said.

The door slid back. They went slowly inside. The room was small, a neat room with a round table in the center, chairs ringing it. The three of them sat down silently, and the two leadys followed after them, taking their places.

“The other Council Members are on their way. They have already been notified and are coming as quickly as they can. Again I urge you to go back down.” The leady surveyed the three human beings. “There is no way you can meet the conditions up here. Even we survive with some trouble, ourselves. How can you expect to do it?”

The leader approached Franks.

“This astonishes and perplexes us,” it said. “Of course we must do what you tell us, but allow me to point out that if you remain here—”

“We know,” Franks said impatiently. “However, we intend to remain, at least until sunrise.”

“If you insist.”

There was silence. The leadys seemed to be conferring with each other, although the three men heard no sound.

“For your own good,” the leader said at last, “you must go back

down. We have discussed this, and it seems to us that you are doing the wrong thing for your own good.”

“We are human beings,” Franks said sharply. “Don’t you understand? We’re men, not machines.”

“That is precisely why you must go back. This room is radioactive; all surface areas are. We calculate that your suits will not protect you for over fifty more minutes. Therefore—”

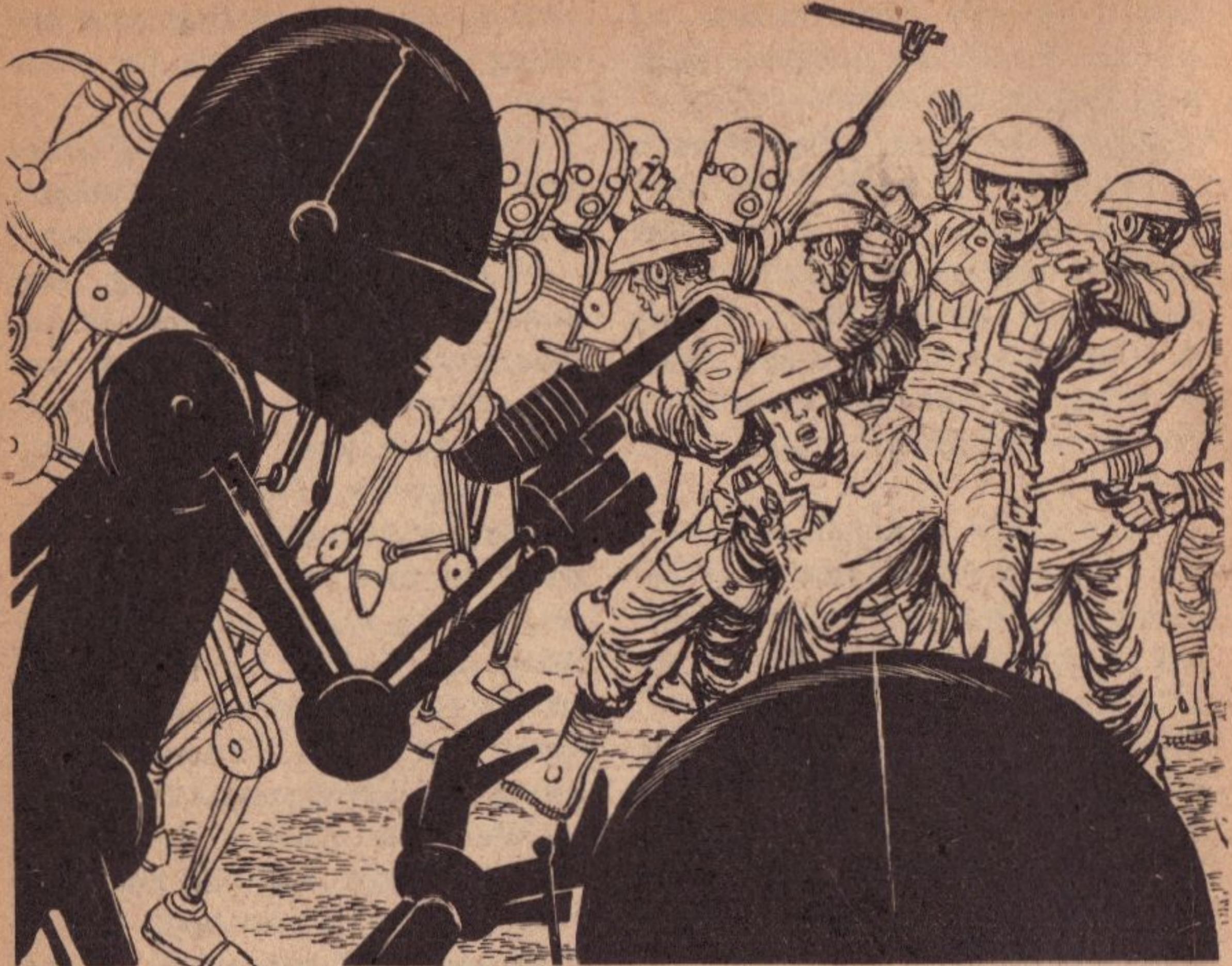
The leadys moved abruptly toward the men, wheeling in a circle, forming a solid row. The men stood up, Taylor reaching awkwardly for his weapon, his fingers numb and stupid. The men stood facing the silent metal figures.

“We must insist,” the leader said, its voice without emotion. “We must take you back to the Tube and send you down on the next car. I am sorry, but it is necessary.”

“What’ll we do?” Moss said nervously to Franks. He touched his gun. “Shall we blast them?”

Franks shook his head. “All right,” he said to the leader. “We’ll go back.”

HE moved toward the door, motioning Taylor and Moss to follow him. They looked at him in surprise, but they came with him. The leadys followed them out into the great warehouse. Slowly they moved toward



the Tube entrance, none of them speaking.

At the lip, Franks turned. "We are going back because we have no choice. There are three of us and about a dozen of you. However, if—"

"Here comes the car," Taylor said.

There was a grating sound from the Tube. D-class leadys moved toward the edge to receive it.

"I am sorry," the leader said,

"but it is for your protection. We are watching over you, literally. You must stay below and let us conduct the war. In a sense, it has come to be *our* war. We must fight it as we see fit."

The car rose to the surface.

Twelve soldiers, armed with Bender pistols, stepped from it and surrounded the three men.

Moss breathed a sigh of relief. "Well, this does change things. It came off just right."

The leader moved back, away



from the soldiers. It studied them intently, glancing from one to the next, apparently trying to make up its mind. At last it made a sign to the other leadys. They coasted aside and a corridor was opened up toward the warehouse.

"Even now," the leader said, "we could send you back by force. But it is evident that this is not really an observation party at all. These soldiers show that you have much more in mind;

this was all carefully prepared."

"Very carefully," Franks said. They closed in.

"How much more, we can only guess. I must admit that we were taken unprepared. We failed utterly to meet the situation. Now force would be absurd, because neither side can afford to injure the other; we, because of the restrictions placed on us regarding human life, you because the war demands—"

The soldiers fired, quick and in fright. Moss dropped to one knee, firing up. The leader dissolved in a cloud of particles. On all sides D- and B-class leadys were rushing up, some with weapons, some with metal slats. The room was in confusion. Off in the distance a siren was screaming. Franks and Taylor were cut off from the others, separated from the soldiers by a wall of metal bodies.

"They can't fire back," Franks said calmly. "This is another bluff. They've tried to bluff us all the way." He fired into the face of a leady. The leady dissolved. "They can only try to frighten us. Remember that."

THEY went on firing and leady after leady vanished. The room reeked with the smell of burning metal, the stink of fused plastic and steel. Taylor had been knocked down. He was struggling

to find his gun, reaching wildly among metal legs, groping frantically to find it. His fingers strained, a handle swam in front of him. Suddenly something came down on his arm, a metal foot. He cried out.

Then it was over. The leadys were moving away, gathering together off to one side. Only four of the Surface Council remained. The others were radioactive particles in the air. D-class leadys were already restoring order, gathering up partly destroyed metal figures and bits and removing them.

Franks breathed a shuddering sigh.

"All right," he said. "You can take us back to the windows. It won't be long now."

The leadys separated, and the human group, Moss and Franks and Taylor and the soldiers, walked slowly across the room, toward the door. They entered the Council Chamber. Already a faint touch of gray mitigated the blackness of the windows.

"Take us outside," Franks said impatiently. "We'll see it directly, not in here."

A door slid open. A chill blast of cold morning air rushed in, chilling them even through their lead suits. The men glanced at each other uneasily.

"Come on," Franks said. "Outside."

He walked out through the door, the others following him.

They were on a hill, overlooking the vast bowl of a valley. Dimly, against the graying sky, the outline of mountains were forming, becoming tangible.

"It'll be bright enough to see in a few minutes," Moss said. He shuddered as a chilling wind caught him and moved around him. "It's worth it, really worth it, to see this again after eight years. Even if it's the last thing we see—"

"Watch," Franks snapped.

They obeyed, silent and subdued. The sky was clearing, brightening each moment. Some place far off, echoing across the valley, a rooster crowed.

"A chicken!" Taylor murmured. "Did you hear?"

Behind them, the leadys had come out and were standing silently, watching, too. The gray sky turned to white and the hills appeared more clearly. Light spread across the valley floor, moving toward them.

"God in heaven!" Franks exclaimed.

Trees, trees and forests. A valley of plants and trees, with a few roads winding among them. Farmhouses. A windmill. A barn, far down below them.

"Look!" Moss whispered.

Color came into the sky. The Sun was approaching. Birds be-

gan to sing. Not far from where they stood, the leaves of a tree danced in the wind.

Franks turned to the row of leadys behind them.

"Eight years. We were tricked. There was no war. As soon as we left the surface—"

"Yes," an A-class leady admitted. "As soon as you left, the war ceased. You're right, it was a hoax. You worked hard under-surface, sending up guns and weapons, and we destroyed them as fast as they came up."

"But why?" Taylor asked, dazed. He stared down at the vast valley below. "Why?"

"**Y**OU created us," the leady said, "to pursue the war for you, while you human beings went below the ground in order to survive. But before we could continue the war, it was necessary to analyze it to determine what its purpose was. We did this, and we found that it had no purpose, except, perhaps, in terms of human needs. Even this was questionable.

"We investigated further. We found that human cultures pass through phases, each culture in its own time. As the culture ages and begins to lose its objectives, conflict arises within it between those who wish to cast it off and set up a new culture-pattern, and those who wish to retain the

old with as little change as possible."

"At this point, a great danger appears. The conflict within threatens to engulf the society in self-war, group against group. The vital traditions may be lost—not merely altered or reformed, but completely destroyed in this period of chaos and anarchy. We have found many such examples in the history of mankind."

"It is necessary for this hatred within the culture to be directed outward, toward an external group, so that the culture itself may survive its crisis. War is the result. War, to a logical mind, is absurd. But in terms of human needs, it plays a vital role. And it will continue to until Man has grown up enough so that no hatred lies within him."

Taylor was listening intently. "Do you think this time will come?"

"Of course. It has almost arrived now. This is the last war. Man is *almost* united into one final culture—a world culture. At this point he stands continent against continent, one half of the world against the other half. Only a single step remains, the jump to a unified culture. Man has climbed slowly upward, tending always toward unification of his culture. It will not be long—

"But it has not come yet, and so the war had to go on, to satis-

fy the last violent surge of hatred that Man felt. Eight years have passed since the war began. In these eight years, we have observed and noted important changes going on in the minds of men. Fatigue and disinterest, we have seen, are gradually taking the place of hatred and fear. The hatred is being exhausted gradually, over a period of time. But for the present, the hoax must go on, at least for a while longer. You are not ready to learn the truth. You would want to continue the war."

"But how did you manage it?" Moss asked. "All the photographs, the samples, the damaged equipment—"

"Come over here." The leady directed them toward a long, low building. "Work goes on constantly, whole staffs laboring to maintain a coherent and convincing picture of a global war."

THEY entered the building. Leadys were working everywhere, poring over tables and desks.

"Examine this project here," the A-class leady said. Two leadys were carefully photographing something, an elaborate model on a table top. "It is a good example."

The men grouped around, trying to see. It was a model of a ruined city.

Taylor studied it in silence for a long time. At last he looked up.

"It's San Francisco," he said in a low voice. "This is a model of San Francisco, destroyed. I saw this on the vidscreen, piped down to us. The bridges were hit—"

"Yes, notice the bridges." The leady traced the ruined span with his metal finger, a tiny spider-web, almost invisible. "You have no doubt seen photographs of this many times, and of the other tables in this building.

"San Francisco itself is completely intact. We restored it soon after you left, rebuilding the parts that had been damaged at the start of the war. The work of manufacturing news goes on all the time in this particular building. We are very careful to see that each part fits in with all the other parts. Much time and effort are devoted to it."

Franks touched one of the tiny model buildings, lying half in ruins. "So this is what you spend your time doing—making model cities and then blasting them."

"No, we do much more. We are caretakers, watching over the whole world. The owners have left for a time, and we must see that the cities are kept clean, that decay is prevented, that everything is kept oiled and in running condition. The gardens, the streets, the water mains, everything must be maintained as it

was eight years ago, so that when the owners return, they will not be displeased. We want to be sure that they will be completely satisfied."

Franks tapped Moss on the arm.

"Come over here," he said in a low voice. "I want to talk to you."

He led Moss and Taylor out of the building, away from the leadys, outside on the hillside. The soldiers followed them. The Sun was up and the sky was turning blue. The air smelled sweet and good, the smell of growing things.

Taylor removed his helmet and took a deep breath.

"I haven't smelled that smell for a long time," he said.

"Listen," Franks said, his voice low and hard. "We must get back down at once. There's a lot to get started on. All this can be turned to our advantage."

"What do you mean?" Moss asked.

"It's a certainty that the Soviets have been tricked, too, the same as us. But we have found out. That gives us an edge over them."

"I see." Moss nodded. "We know, but they don't. Their Surface Council has sold out, the same as ours. It works against them the same way. But if we could—"

"With a hundred top-level

men, we could take over again, restore things as they should be! It would be easy!"

MOSS touched him on the arm. An A-class leady was coming from the building toward them.

"We've seen enough," Franks said, raising his voice. "All this is very serious. It must be reported below and a study made to determine our policy."

The leady said nothing.

Franks waved to the soldiers. "Let's go." He started toward the warehouse.

Most of the soldiers had removed their helmets. Some of them had taken their lead suits off, too, and were relaxing comfortably in their cotton uniforms. They stared around them, down the hillside at the trees and bushes, the vast expanse of green, the mountains and the sky.

"Look at the Sun," one of them murmured.

"It sure is bright as hell," another said.

"We're going back down," Franks said. "Fall in by twos and follow us."

Reluctantly, the soldiers regrouped. The leadys watched without emotion as the men marched slowly back toward the warehouse. Franks and Moss and Taylor led them across the ground, glancing alertly at the

leadys as they walked.

They entered the warehouse. D-class leadys were loading material and weapons on surface carts. Cranes and derricks were working busily everywhere. The work was done with efficiency, but without hurry or excitement.

The men stopped, watching. Leadys operating the little carts moved past them, signaling silently to each other. Guns and parts were being hoisted by magnetic cranes and lowered gently onto waiting carts.

"Come on," Franks said.

He turned toward the lip of the Tube. A row of D-class leadys was standing in front of it, immobile and silent. Franks stopped, moving back. He looked around. An A-class ready was coming toward him.

"Tell them to get out of the way," Franks said. He touched his gun. "You had better move them."

Time passed, an endless moment, without measure. The men stood, nervous and alert, watching the row of leadys in front of them.

"As you wish," the A-class ready said.

It signaled and the D-class leadys moved into life. They stepped slowly aside.

Moss breathed a sigh of relief.

"I'm glad that's over," he said to Franks. "Look at them all.

Why don't they try to stop us? They must know what we're going to do."

Franks laughed. "Stop us? You saw what happened when they tried to stop us before. They can't; they're only machines. We built them so they can't lay hands on us, and they know that."

His voice trailed off.

The men stared at the Tube entrance. Around them the leadys watched, silent and impassive, their metal faces expressionless.

For a long time the men stood without moving. At last Taylor turned away.

"Good God," he said. He was numb, without feeling of any kind.

The Tube was gone. It was sealed shut, fused over. Only a dull surface of cooling metal greeted them.

The Tube had been closed.

FRANKS turned, his face pale and vacant.

The A-class ready shifted. "As you can see, the Tube has been shut. We were prepared for this. As soon as all of you were on the surface, the order was given. If you had gone back when we asked you, you would now be safely down below. We had to work quickly because it was such an immense operation."

"But why?" Moss demanded angrily.

"Because it is unthinkable that you should be allowed to resume the war. With all the Tubes sealed, it will be many months before forces from below can reach the surface, let alone organize a military program. By that time the cycle will have entered its last stages. You will not be so perturbed to find your world intact.

"We had hoped that you would be undersurface when the sealing occurred. Your presence here is a nuisance. When the Soviets broke through, we were able to accomplish their sealing without—"

"The Soviets? They broke through?"

"Several months ago, they came up unexpectedly to see why the war had not been won. We were forced to act with speed. At this moment they are desperately attempting to cut new Tubes to the surface, to resume the war. We have, however, been able to seal each new one as it appears."

The leady regarded the three men calmly.

"We're cut off," Moss said, trembling. "We can't get back. What'll we do?"

"How did you manage to seal the Tube so quickly?" Franks asked the leady. "We've been up here only two hours."

"Bombs are placed just above the first stage of each Tube for such emergencies. They are heat bombs. They fuse lead and rock."

Gripping the handle of his gun, Franks turned to Moss and Taylor.

"What do you say? We can't go back, but we can do a lot of damage, the fifteen of us. We have Bender guns. How about it?"

He looked around. The soldiers had wandered away again, back toward the exit of the building. They were standing outside, looking at the valley and the sky. A few of them were carefully climbing down the slope.

"Would you care to turn over your suits and guns?" the A-class leady asked politely. "The suits are uncomfortable and you'll have no need for weapons. The Russians have given up theirs, as you can see."

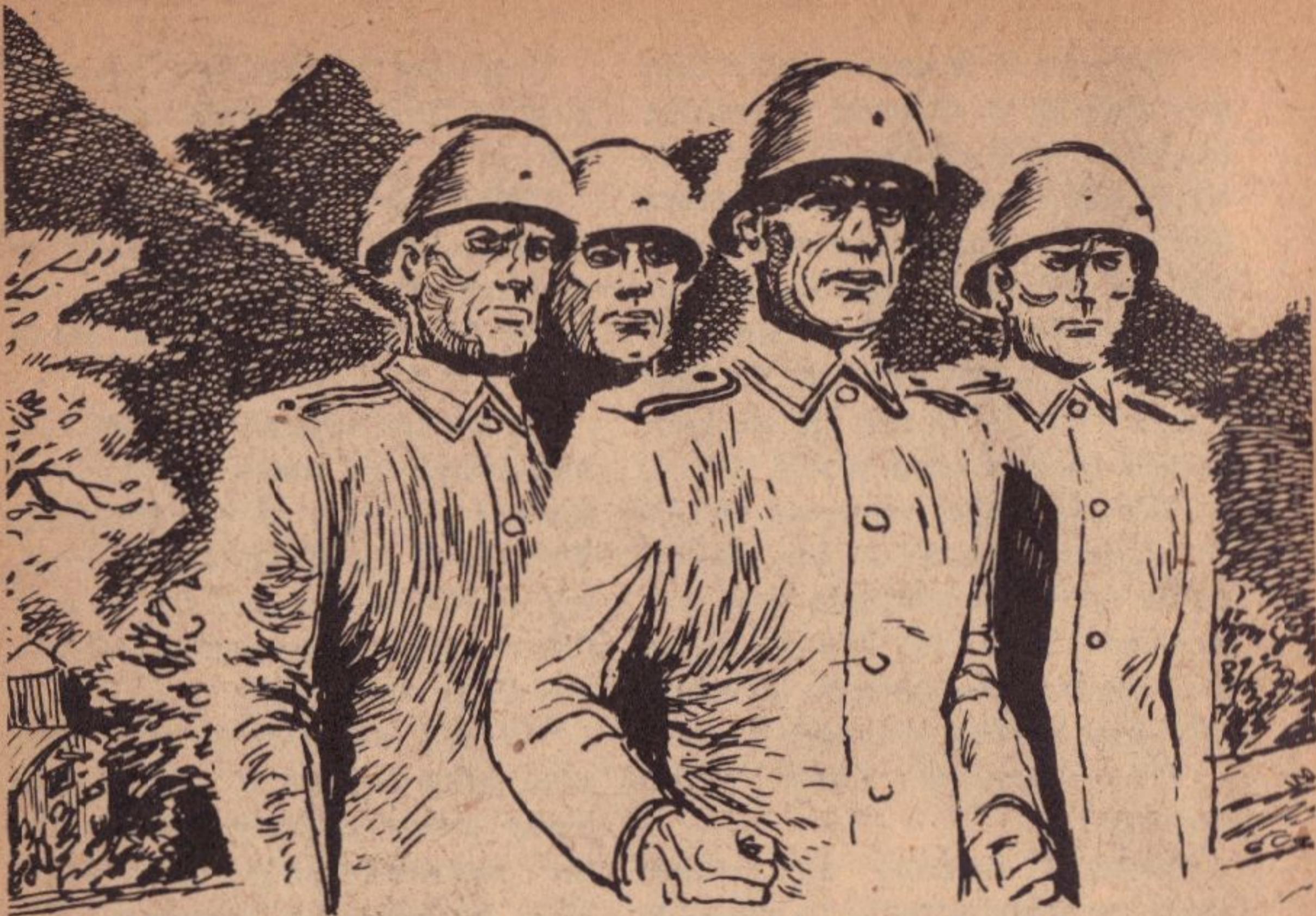
Fingers tensed on triggers. Four men in Russian uniforms were coming toward them from an aircraft that they suddenly realized had landed silently some distance away.

"Let them have it!" Franks shouted.

"They are unarmed," said the leady. "We brought them here so you could begin peace talks."

"We have no authority to speak for our country," Moss said stiffly.

"We do not mean diplomatic discussions," the leady explained. "There will be no more. The working out of daily problems of



existence will teach you how to get along in the same world. It will not be easy, but it will be done."

THE Russians halted and they faced each other with raw hostility.

"I am Colonel Borodoy and I regret giving up our guns," the senior Russian said. "You could have been the first Americans to be killed in almost eight years."

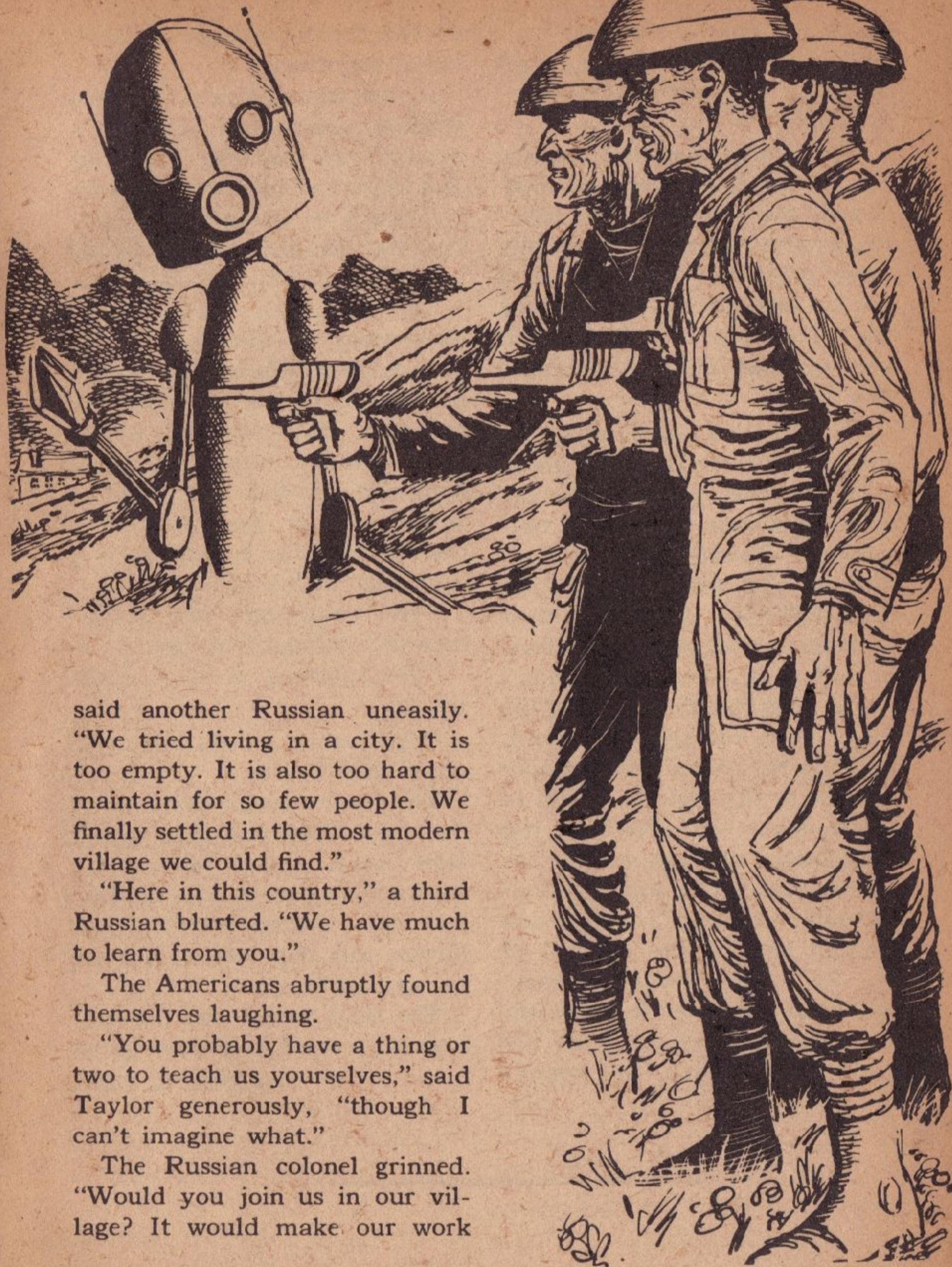
"Or the first Americans to kill," Franks corrected.

"No one would know of it except yourselves," the leady pointed out. "It would be useless

heroism. Your real concern should be surviving on the surface. We have no food for you, you know."

Taylor put his gun in its holster. "They've done a neat job of neutralizing us, damn them. I propose we move into a city, start raising crops with the help of some leadys, and generally make ourselves comfortable." Drawing his lips tight over his teeth, he glared at the A-class leady. "Until our families can come up from undersurface, it's going to be pretty lonesome, but we'll have to manage."

"If I may make a suggestion,"



said another Russian uneasily. "We tried living in a city. It is too empty. It is also too hard to maintain for so few people. We finally settled in the most modern village we could find."

"Here in this country," a third Russian blurted. "We have much to learn from you."

The Americans abruptly found themselves laughing.

"You probably have a thing or two to teach us yourselves," said Taylor generously, "though I can't imagine what."

The Russian colonel grinned. "Would you join us in our village? It would make our work

easier and give us company."

"Your village?" snapped Franks. "It's American, isn't it? It's ours!"

The leady stepped between them. "When our plans are completed, the term will be interchangeable. 'Ours' will eventually mean mankind's." It pointed at the aircraft, which was warming up. "The ship is waiting. Will you join each other in making a new home?"

The Russians waited while the Americans made up their minds.

"I see what the leadys mean about diplomacy becoming outmoded," Franks said at last. "People who work together don't need diplomats. They solve their problems on the operational level instead of at a conference table."

The leady led them toward the ship. "It is the goal of history, unifying the world. From family to tribe to city-state to nation to hemisphere, the direction has been toward unification. Now the hemispheres will be joined and—"

Taylor stopped listening and glanced back at the location of the Tube. Mary was undersurface there. He hated to leave her, even though he couldn't see her again until the Tube was unseal-

ed. But then he shrugged and followed the others.

If this tiny amalgam of former enemies was a good example, it wouldn't be too long before he and Mary and the rest of humanity would be living on the surface like rational human beings instead of blindly hating moles.

"It has taken thousands of generations to achieve," the A-class leady concluded. "Hundreds of centuries of bloodshed and destruction. But each war was a step toward uniting mankind. And now the end is in sight: a world without war. But even that is only the beginning of a new stage of history."

"The conquest of space," breathed Colonel Borodoy.

"The meaning of life," Moss added.

"Eliminating hunger and poverty," said Taylor.

The leady opened the door of the ship. "All that and more. How much more? We cannot foresee it any more than the first men who formed a tribe could foresee this day. But it will be unimaginably great."

The door closed and the ship took off toward their new home.

—PHILIP K. DICK

Teething Ring

By JAMES CAUSEY



*Anyone can make an error, but
the higher the society . . . the
more disastrous the mistake!*

Illustrated by DICK FRANCIS

HALF an hour before, while she had been engrossed in the current soap opera and Harry Junior was screaming

in his crib, Melinda would naturally have slammed the front door in the little man's face. However, when the bell rang, she was

wearing her new Chinese red housecoat, had just lustered her nails to a blinding scarlet, and Harry Junior was sleeping like an angel.

Yawning, Melinda answered the door and the little man said, beaming, "Excellent day. I have geegaws for information."

Melinda did not quite recoil. He was perhaps five feet tall, with a gleaming hairless scalp and a young-old face. He wore a plain gray tunic, and a peddler's tray hung from his thin shoulders.

"Don't want any," Melinda stated flatly.

"Please." He had great, beseeching amber eyes. "They all say that. I haven't much time. I must be back at the University by noon."

"You working your way through college?"

He brightened. "Yes. I suppose you could call it that. Alien anthropology major."

Melinda softened. The initiations those frats pulled nowadays—shaving the poor guy's head, eating goldfish—it was criminal.

"Well?" she asked grudgingly. "What's in the tray?"

"Flanglers," said the little man eagerly. "Oscillioscopes. Portable force-field generators. A neural distorter." Melinda's face was blank. The little man frowned. "You use them, of course? This

is a Class IV culture?" Melinda essayed a weak shrug and the little man sighed with relief. His eyes fled past her to the blank screen of the TV set. "Ah, a monitor." He smiled. "For a moment I was afraid—May I come in?"

MELINDA shrugged, opened the door. This might be interesting, like a vacuum-cleaner salesman who had cleaned her drapes last week for free. And *Kitty Kyle Battles Life* wouldn't be on for almost an hour.

"My name is Porteous," said the little man with an eager smile. "I'm doing a thematic on Class IV cultures." He whipped out a stylus, began jotting down notes. The TV set fascinated him.

"It's turned off right now," Melinda said.

Porteous's eyes widened impossibly. "You mean," he whispered in horror, "that you're exercising Class V privileges? This is terribly confusing. I get doors slammed in my face, when Class Fours are supposed to have a splendid gregorian quotient—you *do* have atomic power, don't you?"

"Oh, sure," said Melinda uncomfortably. This wasn't going to be much fun.

"Space travel?" The little face was intent, sharp.

"Well," Melinda yawned, look-

ing at the blank screen, "they've got Space Patrol, Space Cadet, Tales of Tomorrow . . ."

"Excellent. Rocket ships or force-fields?" Melinda blinked. "Does your husband own one?" Melinda shook her blonde head helplessly. "What are your economic circumstances?"

Melinda took a deep rasping breath, said, "Listen, mister, is this a demonstration or a quiz program?"

"Oh, my excuse. Demonstration, certainly. You will not mind the questions?"

"Questions?" There was an ominous glint in Melinda's blue eyes.

"Your delightful primitive customs, art-forms, personal habits—"

"Look," Melinda said, crimsoning. "This is a respectable neighborhood, and I'm not answering any Kinsey report, understand?"

The little man nodded, scribbling. "Personal habits are tabu? I so regret. The demonstration." He waved grandly at the tray. "Anti-grav sandals? A portable solar converter? Apologizing for this miserable selection, but on Capella they told me—" He followed Melinda's entranced gaze, selected a tiny green vial. "This is merely a regenerative solution. You appear to have no cuts or bruises."

"Oh," said Melinda nastily. "Cures warts, cancer, grows hair, I suppose."

Porteous brightened. "Of course. I see you can scan. Amazing." He scribbled further with his stylus, glanced up, blinked at the obvious scorn on Melinda's face. "Here. Try it."

"You try it." Now watch him squirm!

Porteous hesitated. "Would you like me to grow an extra finger, hair—"

"Grow some hair." Melinda tried not to smile.

The little man unstopped the vial, poured a shimmering green drop on his wrist, frowning.

"Must concentrate," he said. "Thorium base, suspended solution. Really jolts the endocrines, complete control . . . see?"

Melinda's jaw dropped. She stared at the tiny tuft of hair which had sprouted on that bare wrist. She was thinking abruptly, unhappily, about that chignon she had bought yesterday. They had let her buy that for eight dollars when with this stuff she could have a natural one.

"How much?" she inquired cautiously.

"A half hour of your time only," said Porteous.

Melinda grasped the vial firmly, settled down on the sofa with one leg tucked carefully under her.

"Okay, shoot. But nothing personal."

PORTEOUS was delighted. He asked a multitude of questions, most of them pointless, some naive, and Melinda dug into her infinitesimal fund of knowledge and gave. The little man scribbled furiously, clucking like a gravid hen.

"You mean," he asked in amazement, "that you live in these primitive huts of your own volition?"

"It's a G.I. housing project," Melinda said, ashamed.

"Astonishing." He wrote: *Feudal anachronisms and atomic power, side by side. Class Fours periodically "rough it" in back-to-nature-movements.*

Harry Junior chose that moment to begin screaming for his lunch. Porteous sat, trembling. "Is that a Security Alarm?"

"My son," said Melinda despondently, and went into the nursery.

Porteous followed, and watched the ululating child with some trepidation. "Newborn?"

"Eighteen months," said Melinda stiffly, changing diapers. "He's cutting teeth."

Porteous shuddered. "What a pity. Obviously atavistic. Wouldn't the creche accept him? You shouldn't have to keep him here."

"I keep after Harry to get a maid, but he says we can't afford one."

"Manifestly insecure," muttered the little man, studying Harry Junior. "Definite paranoid tendencies."

"He was two weeks premature," volunteered Melinda. "He's real sensitive."

"I know just the thing," Porteous said happily. "Here." He dipped into the glittering litter on the tray and handed Harry Junior a translucent prism. "A neural distorter. We use it to train regressives on Rigel Two. It might be of assistance."

Melinda eyed the thing doubtfully. Harry Junior was peering into the shifting crystal depths with a somewhat strained expression.

"Speeds up the neural flow," explained the little man proudly. "Helps tap the unused eighty per cent. The pre-symptomatic memory is unaffected, due to automatic cerebral lapse in case of overload. I'm afraid it won't do much more than cube his present IQ, and an intelligent idiot is still an idiot, but—"

"How dare you?" Melinda's eyes flashed. "My son is *not* an idiot! You get out of here this minute and take your—things with you." As she reached for the prism, Harry Junior squalled. Melinda relented. "Here," she

said angrily, fumbling with her purse. "How much are they?"

"Medium of exchange?" Porteous rubbed his bald skull. "Oh, I really shouldn't—but it'll make such a wonderful addendum to the chapter on malignant primitives. What is your smallest denomination?"

"Is a dollar okay?" Melinda was hopeful.

Porteous was pleased with the picture of George Washington. He turned the bill over and over in his fingers, at last bowed low and formally, apologized for any tabu violations, and left via the front door.

"Crazy fraternities," muttered Melinda, turning on the TV set.

KITTY KYLE was dull that morning. At length Melinda used some of the liquid in the green vial on her eyelashes, was quite pleased at the results, and hid the rest in the medicine cabinet.

Harry Junior was a model of docility the rest of that day. While Melinda watched TV and munched chocolates, did and redid her hair, Harry Junior played quietly with the crystal prism.

Toward late afternoon, he crawled over to the bookcase, wrestled down the encyclopedia and pawed through it, gurgling with delight. He definitely, Melinda decided, would make a fine

lawyer someday, not a useless putterer like Big Harry, who worked all hours overtime in that damned lab. She scowled as Harry Junior, bored with the encyclopedia, began reaching for one of Big Harry's tomes on nuclear physics. One putterer in the family was enough! But when she tried to take the book away from him, Harry Junior howled so violently that she let well enough alone.

At six-thirty, Big Harry called from the lab, with the usual despondent message that he would not be home for supper. Melinda said a few resigned things about cheerless dinners eaten alone, hinted darkly what lonesome wives sometimes did for company, and Harry said he was very sorry, but this might be *it*, and Melinda hung up on him in a temper.

Precisely fifteen minutes later, the doorbell rang. Melinda opened the front door and gaped. This little man could have been Porteous's double, except for the black metallic tunic, the glacial gray eyes.

"Mrs. Melinda Adams?" Even the voice was frigid.

"Y-Yes. Why—"

"Major Nord, Galactic Security." The little man bowed. "You were visited early this morning by one Porteous." He spoke the name with a certain disgust. "He

left a neural distorter here. Correct?"

Melinda's nod was tremulous. Major Nord came quietly into the living room, shut the door behind him. "My apologies, madam, for the intrusion. Porteous mistook your world for a Class IV culture, instead of a Class VII. Here—" He handed her the crumpled dollar bill. "You may check the serial number. The distorter, please."

MELINDA shrunk limply onto the sofa. "I don't understand," she said painfully. "Was he a thief?"

"He was—careless about his spatial coordinates." Major Nord's teeth showed in the faintest of smiles. "He has been corrected. Where is it?"

"Now look," said Melinda with some asperity. "That thing's kept Harry Junior quiet all day. I bought it in good faith, and it's not my fault—say, have you got a warrant?"

"Madam," said the Major with dignity, "I dislike violating local tabus, but must I explain the impact of a neural distorter on a backwater culture? What if your Neanderthal had been given atomic blasters? Where would you have been today? Swinging through trees, no doubt. What if your Hitler had force-fields?" He exhaled. "Where is your son?"

In the nursery, Harry Junior was contentedly playing with his blocks. The prism lay glinting in the corner.

Major Nord picked it up carefully, scrutinized Harry Junior. His voice was very soft.

"You said he was—playing with it?"

Some vestigial maternal instinct prompted Melinda to shake her head vigorously. The little man stared hard at Harry Junior, who began whimpering. Trembling, Melinda scooped up Harry Junior.

"Is that all you have to do—run around frightening women and children? Take your old distorter and get out. Leave decent people alone!"

Major Nord frowned. If only he could be sure. He peered stonily at Harry Junior, murmured, "Definite egomania. It doesn't seem to have affected him. Strange."

"Do you want me to scream?" Melinda demanded.

Major Nord sighed. He bowed to Melinda, went out, closed the door, touched a tiny stud on his tunic, and vanished.

"The manners of some people," Melinda said to Harry Junior. She was relieved that the Major had not asked for the green vial.

Harry Junior also looked relieved, although for quite a different reason.

BIG HARRY arrived home a little after eleven. There were small worry creases about his mouth and forehead, and the leaden cast of defeat in his eyes. He went into the bedroom and Melinda sleepily told him about the little man working his way through college by peddling silly goods, and about that rude cop named Nord, and Harry said that was simply astonishing and Melinda said, "Harry, you had a drink!"

"I had two drinks," Harry told her owlishly. "You married a failure, dear. Part of the experimental model vaporized, *wooosh*, just like that. On paper it looked so good—"

Melinda had heard it all before. She asked him to see if Harry Junior was covered, and Big Harry went unsteadily into the nursery, sat down by his son's crib.

"Poor little guy," he mused. "Your old man's a bum, a useless tinker. He thought he could send Man to the stars on a string of helium nucleii. Oh, he was smart. Thought of everything. Auxiliary jets to kick off the negative charge, bigger mercury vapor banks—a fine straight thrust of positive Alpha particles." He hiccuped, put his face in his hands.

"Didn't you ever stop to think that a few air molecules could

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defocus the stream? Try a vacuum, stupid."

Big Harry stood up.

"Did you say something son?"

"Gurgle," said Harry Junior.

Big Harry reeled into the living room like a somnambulist.

He got pencil and paper, began jotting frantic formulae. Presently he called a cab and raced back to the laboratory.

MEELINDA was dreaming about little bald men with diamond-studded trays. They were chasing her, they kept pelt- ing her with rubies and emeralds, all they wanted was to ask ques- tions, but she kept running, Harry Junior clasped tightly in her arms. Now they were ringing alarm bells. The bells kept ring- ing and she groaned, sat up in bed, and seized the telephone.

"Darling." Big Harry's voice shook. "I've got it! More auxili- ary shielding plus a vacuum. We'll be rich!"

"That's just fine," said Melinda crossly. "You woke the baby."

Harry Junior was sobbing bit- terly into his pillow. He was sick with disappointment. Even the most favorable extrapolation showed it would take him nineteen years to become master of the world.

An eternity. Nineteen years!

—JAMES CAUSEY

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1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Galaxy Publishing Corp., 421 Hudson Street, New York 14, N. Y.; Editor, Horace Gold, 505 East 14th Street, New York City; Managing editor, Business manager, none.

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GALAXY PUBLISHING CORP.

Robert M. Guinn, President

Sworn to and subscribed before me this 15th day of October 1952, Fay D. Einsohn, Commis- sioner of Deeds, Queens, New York, Kings Bronx County Clks. No. 41-109170. Commission expires March 30, 1953.

GALAXY SCIENCE FICTION

Life Sentence

By JAMES McCONNELL

*"Happy New Year!" she cried.
But how often should one hear
it said in a single lifetime?*

Illustrated by DICK FRANCIS

OUTSIDE, bells were ringing. "Happy New Year!" The mad sound of people crazed for the moment, shouting, echoed the bells.

"Happy New Year!"

A sound of music, waxing, waning, now joined in wild symphony by the voices, now left alone to counterpoint the noise of human celebration. . . .

For a while, Oliver Symmes heard the raucous music of the



crowd. It became a part of him, seemed to come from somewhere inside him, gave him life. And then, as always, it passed on, leaving him empty.

Shadows. . . .

The door to his room opened and a young-looking woman, dressed in a pleasant green uniform, came in and turned up the light. On her sleeve she wore the badge of geriatrician, with the motto, "To Care for the Aged."

"Happy New Year, Mr. Symmes," she said, and went over to stand by the window. In the mild light, the sheen of her hair attracted attention away from the slight imperfections of her face.

She watched the crowd outside, wishing she could be a part of it. There seemed so little life inside the prison where the only function of living was the awaiting of death. "To Care for the Aged." That meant to like and love them as well as to take physical care of them. Only, somehow, it seemed so hard to *really* love them.

She sighed and turned away from the window to look at one of the reasons she could not be with the rest of the world that night.

HE sat bunched up in his chair like a vegetable. She could have closed one of her hands around both his arms together.

Or his legs. Bones and skin and a few little muscles left, and that was all. Skin tight, drumlike, against the skull. Cheeks shrunk, lips slightly parted by the contraction of the skin. Even the wrinkles he should have had were erased by the shrinkage of the epidermis. Even in a strong light, the faint wrinkle lines were barely visible.

After a moment of looking at him, she put a smile back on her face and repeated her greeting.

"I said, 'Happy New Year,' Mr. Symmes."

He raised his eyes to her for a moment, then slowly lowered them, uncomprehendingly.

"He looks just a little bit like a caricature," she said to herself, feeling a little more tenderness towards him. "A cute little stick man made of leaves and twigs and old bark and. . . ."

SHADOWS. For so long there had been shadows. And for a time the fleeting passage of dreams and past memories had been a solace. But now the shadows were withered and old, debilitated and desiccated. They had been sucked dry of interest long ago.

But still they flitted through his mind on crippled wings, flapping about briefly in the now-narrowed shell of his consciousness, then fading back among the

cobwebs. Every once in a while, one of them would return to exercise its wings.

"Did she say, 'Happy New Year?'" he wondered. "New Year's?"

And, at the thought of it, there came shadows out of the past. . .

YOUNG Oliver Symmes laughed. The girl laughed, too. She was good to hold in one's arms, soft like a furry animal, yielding and plush of mouth.

"I love you, Ollie," she said, the warmth of her body close against his.

He laughed again and wrapped her in his arms. He owned her now, owned her smile, her love for him, her mind and her wonderful body. She belonged to him, and the thrill of ownership was strong and exciting.

"I'll always love you, Ollie. I'll love only you." She ran her fingers in and out of his hair, caressing each strand as it went through her fingers. "I love the strength of your arms, the firmness of your body."

Again he laughed, surrendering all his consciousness to the warm magic of her spell.

"I love the shading of your hair and eyes, the smooth angularity of your tallness, the red ecstasy of your mind." Her fingers slipped down the back of

his neck, playing little games with his flesh and hair. "I'll always love you, Ollie."

He kissed her savagely.

During the daytime, there was his work at the anthropological laboratories, the joy of poking among the cultures of the past. And at night there was the joy of living with her, of sharing the tantalizing stimulations of the culture of the present, the infinite varieties of love mingling with passions.

For months there was this happiness of the closeness of her. And then she was gone from him, for the moment. He still owned her, -but they were physically apart and there was the hunger of loneliness in him. The months his work kept them apart seemed like centuries, until, finally, he could return.

HE was walking through a happy, shouting crowd, walking back to her. It was the eve of the new year, a time for beginnings, a time for looking from the pleasures of the past to those waiting in the future. There was a happy outcry inside him that matched the mood of the crowd.

"Happy New Year!"

Women stopped him on the street, asking for his affection. But he passed them by, for she was waiting for him and he was

hungry for the possessive love of his slave.

He went eagerly into the building where they lived.

THE crowd was gone. A door was opening. The voice of his love, sudden, full of naked surprise, bleated at him. And another voice, that of a man standing behind her, croaked with hasty excuses and fear.

A change of hungers — it seemed no more complex than that.

He put his hand to his side and took out a piece of shaped metal, pointing it at the man. A blast of light and the man was dead. He put the weapon aside.

Young Oliver Symmes walked toward the girl. She backed away from him, pleading with words, eyes, body. He noticed for the first time the many small imperfections of her face and figure.

Cornered, she raised her arms to embrace him. He raised his arms to answer the embrace, but his hands stopped and felt their way around the whiteness of her neck. He pressed his hands together, thumbs tight against each other.

Minutes later, he dropped her to the floor and stood looking at her. He had owned her and then destroyed her when his ownership was in dispute.

He bent to kiss the lax lips.

SHADOWS. As a man grows older, the weight and size of his brain decrease, leaving cavities in his mind. The years that pass are a digger, a giant excavator, scooping the mass of past experience up in the maw of dissipation. The slow, sure evacuation of the passing decades leaves wing-room in a man's head for stirring memories.

The withered man looked up again. The woman in the green uniform was smiling at him through parted, almost twisted lips.

"I suppose that this time of year is the worst for you, isn't it?" she asked sympathetically. The first requirement of a good geriatrician was sympathy and understanding. She determined to try harder to understand.

The old man made no answer, only staring at her face. But his eyes were blank — seeing, yet blind to all around him. She frowned for a moment as she looked at him. The unnatural hairlessness of his body puzzled her, making it difficult for her to understand him while the thought was in her mind—that and the trouble she had getting through to him.

She stared at him as if to pierce the blankness of his gaze. Behind his eyes lay the emptiness of age, the open wound of stifled years.

"I'll move you over to the window, Mr. Symmes," she told him in soothing tones, her smile reappearing. "Then you can look out and see all the people. Won't that be fun?"

Picking up a box from the table, she adjusted a dial. The chair in which he was sitting rose slightly from the floor and positioned itself in front of the window. The woman walked to the wall beside him and corrected the visual index of the glass to match the weakness of the old man's eyes.

"See, down there? Just look at them pushing about."

A rabble of faces swam on the glass in front of him, faces of unfamiliar people, all of them unknown and unknowable to him.

Inside him the whisper of the wings mounted in pitch with a whining, leathery sound. The images of dead faces came flying up, careening across his mind, mingling and merging with the faces of the living. The glass became an anomalous torrent of faces.

Dead faces . . .

FOUR walls around him, bare to the point of boredom. Through the barred window, the throbbing throat of the crowd talked to him. His young body took it in, his young mind accepted it, catalogued it and pushed it out of consciousness.

And for each individual voice there was an individual face, staring up at his cell from the comparative safety of outside. Young Oliver Symmes could not see the faces from where he sat, waiting, but he could sense them.

There came a feel of hands on his shoulder; his reverie was interrupted. Arms under his raised him to his feet. A face smiled, almost kindly, in understanding.

"They're waiting for you, Mr. Symmes. It's time to go."

More words. Walking from this place to that, mostly with a crowd of people at his shoulders, pressing him in. Then a door ahead of him, ornate in carving, a replica of the doors to the Roman Palace of Justice many centuries before. Again his mind catalogued the impressions.

Then, like the faces of the people outside his cell, the pictures of the bas-relief faded away, melted and merged into a pelagic blackness.

The doors opened and, with part of the crowd still at his side, he went through. The people inside were standing; stick men, it seemed to him, with painted balloons for faces. The sound of the rapping of a gavel caught his ear. The people sat, and the trial began.

"This court will admit to evidence only those events and artifacts which are proved true and

relevant to the alleged crime."

An obsequious clearing of throats. A coughing now and then.

"... And did you see the defendant, Oliver Symmes, enter the apartment of the deceased on the night of the Thirty-first of December, two thousand and . . ."

"I did. He was wearing a sort of orange tunic . . ."

Someone whispered in his ear. Oliver Symmes heard and shook his head.

"... You are personally acquainted with the defendant?"

"I am. We worked for United Anthropological Laboratories before he . . ."

"Objection."

"Sustained."

The blackness of the judge's robe puzzled him. A vestige, an anachronism, handed down from centuries before. White was the color of truth, not black.

"You swear that you found the defendant standing over the body of the deceased woman on the night of . . ."

"Not standing, sir. He was bending over, kissing . . ."

"Your witness."

DAYS of it, back and forth, testimony and more testimony. Evidence and more evidence and the lack of it. Smiling lawyers, grimacing lawyers, soothing lawyers and cackling

lawyers. And witnesses.

"You will please take the stand, Mr. Symmes."

He walked to the chair and sat down. The courtroom leaned forward, the stick men bowed toward him slightly, as in eager applause of the coming most dramatic moment of a spectacle.

"You will please tell the court in your own words . . ."

He mouthed the words. The whole story, the New Year's crowd, his hunger for her, his arrival, the other man and his babbling, the woman and how she looked, his feelings, his transfigured passions, and the deaths. He told the story again and again until they seemed satisfied.

"You understand, Mr. Symmes, that you have committed a most heinous crime. You have killed two people in a passion that, while it used to be forgiven by the circumstances, is no longer tolerated by this government. You have killed, Mr. Symmes!"

The face before him was intense. He looked at it, not understanding the reason for the frozen look of malice and hatred.

"She was mine. When she betrayed me, I killed her. Is that wrong?"

The stick men snorted and poked each other in the ribs with derisive elbows.

There were more words and more questions. He looked at the

face of the judge and wondered, for a moment, if perhaps the color of the robe was to match the apparent disposition of the man.

And then came the silence, a time of sitting and waiting. He sensed the wondering stares of the stick men, wide-eyed in apprehension, suspended from the drabness of their own lives for the moment by the stark visitation of tragedy in his. They gabbed among themselves and wagered on the verdict.

The man next to him leaned over and tapped him on the arm. Everyone stood up and then, curiously, sat down again almost at once. He felt the tension present in the courtroom, but was strangely relaxed himself. It was peculiar that they were all so excited.

"Your Honor, having duly considered the seriousness of the crime and the evidence presented . . ."

The balloon faces on the stick men stretched in anticipation.

". . . taking full cognizance of the admitted passion on the part of the defendant and the circumstances . . ."

The balloons were strained, contorted out of all proportion in their eagerness.

". . . we find the defendant guilty of murder, making no recommendation for consideration by the Court."

The balloons exploded!

DEAFENING and more than deafening, the uproar of the voices was beyond belief. He threw his hands up over his ears to shut out the noise.

The gavel crashed again and again, striking the polished oak in deadly cadence, stifling the voices. Over the stillness, one man spoke. He recognized the black voice of the judge and took his hands from his ears and put them in his lap. He was told to stand and he obeyed.

"Oliver Symmes, there has been no taking of human lives in this nation for many years, until your shockingly primitive crime. We had taken pride in this record. Now you have broken it. We must not only punish you adequately and appropriately, but we must also make of your punishment a warning to anyone who would follow your irrational example.

"Naturally, we no longer have either the apparatus to execute anyone or an executioner. We do not believe that a stupidly unreasoning act should incite us to equally unreasoning reprisal, for we would then be as guilty of irrationality as you.

"We must establish our own precedent, since there is no recent one and the ancient punishments are not acceptable to us.

Therefore, because we are humane and reasoning persons, the Court orders that the defendant, Oliver Symmes, be placed in the National Hospital for observation, study and experimentation so that this crime may never again be repeated. He is to be kept there under perpetual care until no possible human skill or resource can further sustain life in his body."

Someone jumped erect beside him, quivering with horror and indignation. It was his lawyer.

"Your Honor, we throw ourselves upon the mercy of the Court. No matter what the crime of the defendant, this is a greater one. For this is a crime not just against my client, but against all men. This sentence robs all men of their most precious freedom—the right to die at their appointed times. Nothing is more damaging to the basic dignity of the human race than this most hideous . . ."

". . . This Court recognizes only the four freedoms. The freedom of death is not one of these. The sentence stands. The Court is adjourned."

There were tears in the eyes of his lawyer, although young Oliver Symmes did not quite comprehend, as yet, their meaning. Hands, rougher than before, grasped his arms with strange firmness and led him off into . . .

SHADOWS. They come in cycles, each prompted to activity by the one preceding it. They flutter in unbelievable clusters, wheel in untranslatable formations through the cerebric wasteland that is the aged mind of Oliver Symmes. They have no meaning to him, save for a furtive spark of recognition that intrudes upon him once in a while.

The woman in the green uniform, standing to one side of the window, smiled at him again. It was much simpler to care for him, she thought, if only one conceived of him as being a sort of sweet little wornout teddy bear. Yes, that was what he was, a little teddy bear that had gotten most of its stuffing lost and had shriveled and shrunk. And one can easily love and pamper a teddy bear.

"Can you see the crowd all right, Mr. Symmes? This is a good place to watch from, isn't it?"

Her words fell upon his ears, setting up vibrations and oscillations in the basilar membranes. Nerve cells triggered impulses that sped along neutral pathways to the withered cortex, where they lost themselves in the welter of atrophy and disintegration. They emerged into his consciousness as part of a gestaltic confusion.

"Isn't it exciting, watching

from here?" she asked, showing enthusiasm at the sight of the crowd below. "You should be enjoying this immensely, you know. Not all the people here have windows to look out of like this." There, now, that should make him feel a little better.

His eyes, in their wandering, came to rest upon her uniform, so cool and comforting in its greenness. A flicker of light gleamed from the metallic insignia on her sleeve: "To Care for the Aged." Somewhere inside him an association clicked, a brief fire of response to a past event kindled into a short-lived flame, lighting the way through cobwebs for another shadow . . .

HOW many years he had been waiting for the opportunity, he did not know. It seemed like decades, although it might have been only a handful of months. And all the time he had waited, he could feel himself growing older, could sense the syneresis, the slow solidifying of the life elements within him. He sat quietly and grew old, thinking the chance would never come.

But it did come, when he had least expected it.

It was a treat—his birthday. Because of it, they had given him actual food for the first time in years: a cake, conspicuous in its

barrenness of candles; a glass of real vegetable juices; a dab of potato; an indescribable green that might have been anything at all; and a little steak. A succulent, savory-looking piece of genuine meat.

The richness of the food would probably make him sick, so unaccustomed to solid food was his digestive tract by now, but it would be worth the pain.

And it was then that he saw the knife.

It lay there on the tray, its honed edge glittering in the light of the sun. A sharp knife, capable of cutting steak—or flesh of any kind.

"Well, how do you like your birthday present, Mr. Symmes?"

He looked up quickly at the woman standing beside the tray. The yellow pallor of her middle-aged skin matched the color of her uniform. She wore the insignia of a geriatrics supervisor.

He let a little smile flicker across his face. "Why, it's . . . it's wonderful. I never expected it at all. It's been so long, you know. So very long."

How could he get rid of her? If he tried anything with her watching, she would stop him. And then he'd never get another chance.

"I'm glad you like it, Mr. Symmes. Synthetic foods do get

tiresome after a while, don't they?"

The idea came with suddenness and he responded to it quickly.

"But where are my pink pills? I always take them at lunch."

"You won't need them if you're eating real food."

He whipped his voice into petulance: "Yes, I will! I don't care if it is real food—I want my pills!"

"I'll get them for you later. Go ahead and eat first."

"I can't eat until I take my pink pills! You ought to know that! I won't touch a thing until I get them! You've ruined my birthday party."

The whims of the aging are without logic, so she went to get the pills, leaving Oliver Symmes and the gleaming, sharp knife together, unattended.

WHERE should he start? The heart? No, that would be too quick, too easy to repair. Then where?

He remembered his studies of the middle Japanese culture and the methods of suicide practiced at that time. The intestines! So many of them to cut and slash at, so much damage that might be done before death set in! Maybe even the lungs! But he must hurry.

Picking up the knife, he point-

ed it as his appendix. For a moment he hesitated, and his eyes observed again the little feast laid out before him. He thought briefly about pausing for just a while to taste the little steak, to nibble briefly at the delectable-looking cake. He hated to leave it untouched. It had been such a long time . . .

The sudden memory of time, and how much of it he had spent hoping for this moment, snapped his attention back to the knife. Steeling his grip on it, he pressed it in hard.

His eyes bulged with the excruciating pain as he wrenched the knife from right to left, twisting it wildly as he went, blindly slashing at his vital organs with the hope that once and for all he could stop the long and eternal waiting.

His mouth filled with the taste of blood. He spat it out through clenched teeth. It gushed down his chin, staining the cleanliness of his robe. His lips parted to scream.

And then his eyes closed.

AND opened again! He was staring at the ceiling, but the men and women standing around him got in his way.

Their lips were moving, their faces unperturbed.

"That was a nasty thing for him to do."

"They all do it, once or twice, until they learn."

"Third time for him, isn't it?"

"Yes, I believe so. First time he tried hanging himself. Second time he was beating his head against the wall when we came and stopped him. Bloody mess that one was."

"Nothing to compare with this, of course."

"Well, naturally."

Oliver Symmes felt sick with fear of frustration.

"Nice technique you showed, Doctor. He'd been dead at least an hour when we started, hadn't he?"

"Almost two," someone else said. "An amazing job."

"Thank you. But it wasn't too difficult. Just a little patching here and there."

He felt his legs being shifted for him.

"Be careful there, Nurse. Handle him gently. *Fragilitas Ossium*, you know. Old bones break very easily."

"Sorry, Doctor."

"Not that we couldn't fix them up immediately if they did."

"Naturally, Doctor."

"I wish they'd try something different for a change."

"The woman in the next room lost an eye last year, trying to reach the pre-frontals. Good as new now, of course."

He wanted to vomit at the use-

lessness of it all.

"By the way, what's he in for? Do you know?"

"No, I'd have to look it up."

"Probably newness."

"Or taxes."

"Or maybe even slander."

"Is that on the prescribed anti-social list now?"

"Oh, yes. It was passed just before the destructive criticism law."

"Think he'll try this messy business again?"

"They all do."

"They do, don't they? Don't they ever learn it's no use?"

"Eventually. Some are just harder-to convince than others."

The pain was gone. He closed his eyes and slipped off into darkness again and into . . .

SHADOWS. In slow and ponderous fashion they float across the sea of his mind, like wandering bits of sargasso weed on the brackish water of a dying ocean. Each one dreamed a thousand times too many, each separate strand of memory-weed now nothing but a stereotyped shred of what might have once been a part of life and of living.

With the quietness of deserted ships they drift in procession past his sphere of consciousness. Wait! There's one that seems familiar. He stops the mental parade for a moment, not hearing

the voice of his companion, the woman in the green uniform.

"It's getting late, Mr. Symmes." She turned from the window and glanced at the wizenedness, the fragile remainder of the man, the almost empty shell. It was a pity he wasn't able to play games with her like some of the others. That made it so much easier. "Don't you think it's about time you went to bed? Early to bed and early to rise, you know."

That memory of a needle, pointed and gleaming. What was it?

Oh, yes. Stick it in his arm, push the plunger, pull it out; and wait for him to die. First one disease and then another, to each he happily succumbed, in the interests of science, only to be resuscitated. Each time a willing volunteer, an eager guinea pig, he had hoped for the ease of death, praying that for once they'd wait too long, the germs would prove too virulent, that something would go wrong.

"There, now, you just lie back and get comfortable," she said, walking over to the table. "But it has been fun, hasn't it? Watching the crowds, I mean." She felt he must be much happier now, and the knowledge of it gave her a sense of success. She was living up to her pledge, "To Care for the Aged."

Diabetes, tuberculosis, cancer of the stomach, tumor of the brain. He'd had them all, and many others. They had swarmed to him through the gouged skin-openings made by the gleaming needle. And each had brought the freedom of blackness, of death, sometimes for an hour, sometimes for a whole week. But always life returned again, and the waiting, waiting, waiting.

"I enjoy New Year's myself," the woman said, her hands caressing a dial. Slowly, with gentle undulation, his chair rose from the floor and cradled the aged tiredness that was Oliver Symmes to his bed. With almost tender devotion, his body was mechanically shifted from the portable chair to the freshly made bed.

ONE of his arms was caught for just a moment under the slight weight of his body. There was a short, snapping sound, but Oliver Symmes took no notice. His face remained impassive. Even pain had lost its meaning.

"It's a pity we couldn't have been outside with the rest of them, celebrating," she said, as she arranged the covers around him, not noticing the arm herself.

This was the part of her job she enjoyed most—tucking the nice little man into bed. He did look sweet there, under the cov-

ers, didn't he?

"Just imagine, Mr. Symmes, another year's gone by, and what have we accomplished?"

Her prattle seeped in and he became aware of it and what she was saying. New Year?

"What—what year—is this?" He spoke with great difficulty, from the long disuse of vocal cords. It was hardly more than a whisper, but she heard and was startled.

"Why, Mr. Symmes, it's been so long since you've talked." She paused, but realized that she had not answered his question.

"It's '73, of course. Last year was '72, so tonight's the start of '73."

'73? Had it been fifty years since he came here? Had it been just that long?

"What—" She leaned closer to him as he struggled for the word. "What—century?"

Her astonishment was gone. He was teasing her, like the woman on the next level. These old ones were great for that!

"Now, Mr. Symmes, everybody knows what century it is." She smiled at him glowingly, thinking she had caught him at a prank. It was nice, she thought, to have gotten through to him tonight, on the eve of the new

year. That meant that she was living up to her motto the way she ought to be.

She'd have to tell the supervisor about it.

Oliver Symmes turned to face the ceiling, his mind full of dusty whispers. What century was it? She hadn't answered. It might have been a hundred and fifty years ago he came here, instead of just fifty. Or possibly two hundred and fifty, or . . .

"Now, you be good, and sleep tight, and I'll see you in the morning." Her hand passed over a glowing stud and the room light dimmed to a quiet glow. Lying there in the bed, he did look like a teddy bear, a dear little teddy bear. She was so happy.

"Good night, Mr. Symmes."

She closed the door.

OUTSIDE, bells were ringing.
"Happy New Year."

The ceiling stared back at him.

The mad sound of people crazed for the moment, shouting, echoed the bells.

"Happy New Year!"

He turned his head to one side.

"Happy New Year!"

And again . . . and again . . . and again.

—JAMES McCONNELL

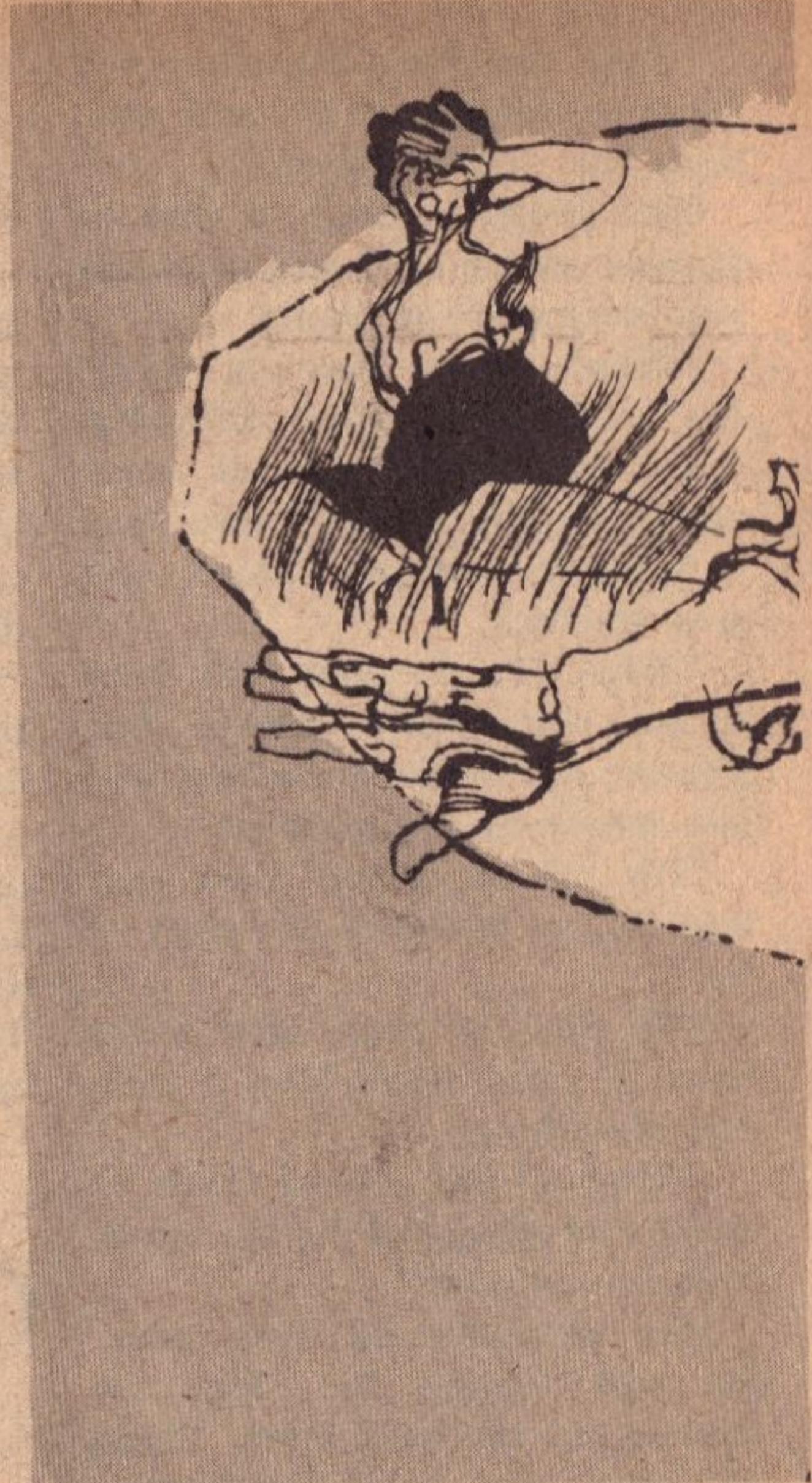
The Inhabited

By
**RICHARD
WILSON**

Illustrated by **ASHMAN**

TWO slitted green eyes loomed up directly in front of him. He plunged into them immediately.

He had just made the voyage, naked through the dimension stratum, and he scurried into the first available refuge, to hover





***Containing a foe is sound military thinking
— unless it's carried out so literally that
everybody becomes an innocent Trojan Horse!***

there, gasping.

The word "he" does not strictly apply to the creature, for it had no sex, nor are the words

"naked," "scurried," "hover" and "gasping" accurate at all. But there are no English words to describe properly what it was and

how it moved, except in very general terms. There are no Asiatic, African or European words, though perhaps there are mathematical symbols. But, because this is not a technical paper, the symbols have no place in it.

He was a sort of spy, a sort of fifth-columnist. He had some of the characteristics of a kamikaze pilot, too, because there was no telling if he'd get back from his mission.

Hovering in his refuge and gasping for breath, so to speak, he tried to compose his thoughts after the terrifying journey and adjust himself to his new environment, so he could get to work. His job, as first traveler to this new world, the Earth, was to learn if it were suitable for habitation by his fellow beings back home. Their world was about ended and they had to move or die.

He was being discomfited, however, in his initial adjustment. His first stop in the new world—unfortunately, not only for his dignity, but for his equilibrium—had been in the mind of a cat.

IT was his own fault, really. He and the others had decided that his first in a series of temporary habitations should be in one of the lower order of animals. It was a matter of precaution—the mind would be easy to con-

trol, if it came to a contest. Also, there would be less chance of running into a mind-screen and being trapped or destroyed.

The cat had no mind-screen, of course; some might even have argued that she didn't have a mind, especially the human couple she lived with. But whatever she did have was actively at work, feeling the solid tree-branch under her claws and the leaves against which her tail switched and seeing the half-grown chickens below.

The chickens were scratching in the forbidden vegetable garden. The cat, the runt of her litter and thus named Midge, often had been chased out of the garden herself, but it was no sense of justice which now set her little gray behind to wriggling in preparation for her leap. It was mischief, pure and simple, which motivated her.

Midge leaped, and the visitor, who had made the journey between dimensions without losing consciousness, blacked out.

When he revived, he was being rocketed along in an up-and-down and at the same time side-ward series of motions which got him all giddy. With an effort he oriented himself so that the cat's vision became his, and he watched in distaste as the chickens scurried, scrawny wings lifted and beaks achirp, this way and

that to escape the monstrous cat.

The cat never touched the chickens; she was content to chase them. When she had divided the flock in half, six in the pea patch and six under the porch, she lay down in the shade of the front steps and reflectively licked a paw.

The spy got the impression of reflection, but he was baffledly unable to figure out what the cat was reflecting on. Midge in turn licked a paw, rolled in the dust, arched her back against the warm stone of the steps and snapped cautiously at a low-flying wasp. She was a contented cat. The impression of contentment came through very well.

The dimension traveler got only one other impression at the moment—one of languor.

The cat, after a prodigious pink yawn, went to sleep. The traveler, although he had never known the experience of voluntary unconsciousness, was tempted to do the same. But he fought against the influence of his host and, robbed of vision with the closing of the cat's eyes, he meditated.

He had been on Earth less than ten minutes, but his meditation consisted of saying to himself in his own way that if he was ever going to get anything done, he'd better escape from this cat's mind.

He accomplished that a few minutes later, when there was a crunching of gravel in the driveway and a battered Plymouth stopped and a man stepped out. Midge opened her eyes, crept up behind a row of stones bordering the path to the driveway and jumped delicately out at the man, who tried unsuccessfully to gather her into his arms.

Through the cat's eyes from behind the porch steps, where Midge had fled, the traveler took stock of the human being it was about to inhabit:

Five-feet-elevenish, thirtyish, blond-brown-haired, blue-summer-suited.

And no mind-screen.

The traveler traveled and in an instant he was looking down from his new height at the gray undersized cat. Then the screen door of the porch opened and a female human being appeared.

WITH the male human impressions now his, the traveler experienced some interesting sensations. There was a body-to-body togetherness apparently called "gimmea hug" and a face-to-face-touching ceremony, "kiss."

"Hmm," thought the traveler, in his own way. "Hmm."

The greeting ceremony was followed by one that had this catechism:

"Suppareddi?"

"Onnatable."

Then came the "eating."

This eating, something he had never done, was all right, he decided. He wondered if cats ate, too. Yes, Midge was under the gas stove, chewing delicately at a different kind of preparation.

There was a great deal of eating. The traveler knew from the inspection of the mind he was inhabiting that the man was enormously hungry and tired almost to exhaustion.

"The damn job had to go out today," was what had happened. "We worked till almost eight o'clock. I think I'll take a nap after supper while you do the dishes."

The traveler understood perfectly, for he was a very sympathetic type. That was one reason they had chosen him for the transdimensional exploration. They had figured the best applicant for the job would be one with an intellect highly attuned to the vibrations of these others, known dimly through the warp-view, one extremely sensitive and with a great capacity for appreciation. Shrewd, too, of course.

The traveler tried to exercise control. Just a trace of it at first. He attempted to dissuade the man from having his nap. But his effort was ignored.

The man went to sleep as soon

as he lay down on the couch in the living room. Once again, as the eyes closed, the traveler was imprisoned. He hadn't realized it until now, but he evidently couldn't transfer from one mind to another except through the eyes, once he was inside. He had planned to explore the woman's mind, but now he was trapped, at least temporarily.

Oh, well. He composed himself as best he could to await the awakening. This sleeping business was a waste of time.

There were footsteps and a whistling noise outside. The inhabited man heard the sounds and woke up, irritated. He opened his eyes a slit as his wife told the neighbor that Charlie was taking a nap, worn out from a hard day at the office, and the visitor, darting free, transferred again.

But he miscalculated and there he was in the mind of the neighbor. Irritated with himself, the traveler was about to jump to the mind of the woman when he was caught up in the excitement that was consuming his new host.

"Sorry," said the neighbor. "The new batch of records I ordered came today and I thought Charlie'd like to hear them. Tell him to come over tomorrow night, if he wants to hear the solidest combo since Muggsy's Roseland days."

The wife said all right, George,

she'd tell him. But the traveler was experiencing the excited memories of a dixieland jazz band in his new host's mind, and he knew he'd be hearing these fantastically wonderful new sounds at first hand as soon as George got back to his turntable.

They could hardly wait, George and his inhabitant both.

HIS inhabitant had come from a dimension-world of vast, contemplative silences. There was no talk, no speech vibrations, no noise which could not be shut out by the turning of a mental switch. Communication was from mind to mind, not from mouth to ear. It was a world of peaceful silence, where everything had been done, where the struggle for physical existence had ended, and where there remained only the sweet fruits of past labor to be enjoyed.

That had been the state of affairs, at any rate, up until the time of the Change, which was something the beings of the world could not stop. It was not a new threat from the lower orders, which they had met and overcome before, innumerable times. It was not a threat from outside —no invasion such as they had turned back in the past. Nor was it a cooling of their world or the danger of imminent collision with another.

The Change came from within.

It was decadence. There was nothing left for the beings to do. They had solved all their problems and could find no new ones. They had exhausted the intricate workings of reflection, academic hypothetica and mind-play; there hadn't been a new game, for instance, in the lifetime of the oldest inhabitant.

And so they were dying of boredom. This very realization had for a time halted the creeping menace, because, as they came to accept it and discuss ways of meeting it, the peril itself subsided. But the moment they relaxed, the Change started again.

Something had to be done. Mere theorizing about their situation was not enough. It was then that they sent their spy abroad.

Because they had at one time or another visited each of the planets in their solar system and had exhausted their possibilities or found them barren, and because they were not equipped, even at the peak of their physical development, for intergalactic flight, there remained only one way to travel—in time.

Not forward or backward, for both had been tried. Travel ahead had been discouraging—in fact, it had convinced them that their normal passage through the years had to be stopped. The reason had been made dramatically clear —they, the master race, did not

exist in the future. They had vanished and the lower forms of life had begun to take over.

Travel into the past would be even more boring than continued existence in the present, they realized, because they would be re-living the experiences they had had and still vividly remembered, and would be incapable of changing them. It would be both tiresome and frustrating.

That left only one way to go—sideways in time, across the dimension line—to a world like their own, but which had developed so differently through the eons that to visit it and conquer the minds of its inhabitants would be worth while.

In that way they picked Earth for their victim and sent out their spy. Just one spy. If he didn't return, they'd send another. There was enough time. And they had to be sure.

GEORGE put a record on the phonograph and fixed himself a drink while the machine warmed up.

The interdimensional invader reacted pleasurable to the taste and instant warming effect of the liquor on George's mind.

"Ahh!" said George aloud, and his temporary inhabitant agreed with him.

George lifted the phonograph needle into the groove and went

to sit on the edge of a chair. Jazz poured out of the speaker and the man beat out the time with his heels and toes.

The visitor in his mind experimented with control. He went at it subtly, at first, so as not to alarm his host. He tried to quiet the beating of time with the feet. He suggested that George cross his legs instead. The beating of time continued. The visitor urged that George do this little thing he asked; he bent all his powers to the suggestion, concentrating on the tapping feet. There wasn't even a glimmer of reaction.

Instead, there was a reverse effect. The pounding of music was insistent. The visitor relaxed. He rationalized and told himself he would try another time. Now he would observe this phenomenon. But he became more than just an observer.

The visitor reeled with sensation. The vibrations gripped him, twisted him and wrung him out. He was limp, palpitating and thoroughly happy when the record ended and George got up immediately to put on another.

Hours later, drunk with the jazz and the liquor, the visitor went blissfully to sleep inside George's mind when his host went to bed.

He awoke, with George, to the experience of a nagging throb. But in a few minutes, after a



shower, shave and breakfast with steaming coffee, it was gone, and the visitor looked forward to the coming day.

It was George's day off and he was going fishing. Humming to himself, he got out his reel and flies and other paraphernalia and contentedly arranged them in the back of his car. Visions of the fine, quiet time he was going to have went through George's mind, and his inhabitant decided he had better leave. He had to get on with his exploration; he mustn't allow himself to be trapped into just having fun.

But he stayed with George as the fisherman drove his car out of the garage and along a highway. The day was sunny and warm. There was a slight wind and the green trees sighed delicately in it. The birds were pleasantly vocal and the colors were superb.

The visitor found it oddly familiar. Then he realized what it was.

His world was like this, too. It had the trees, the birds, the wind and the colors. All were there. But its people had long since ceased to appreciate them. Their existence had turned inward and the external things no longer were of interest. Yet the visitor, through George's eyes, found this world delightful. He reveled in its beauty, its breath-

taking panorama and its balance. And he wondered if he was able to appreciate it for the first time now because he was being active, although in a vicarious way, and participating in life, instead of merely reflecting on it. This would be a clue to have analyzed by the greater minds to which he would report.

Then, with a wrench, the visitor chided himself. He was allowing himself to identify too closely with this mortal, with his appreciation of such diverse pursuits as jazz and fishing. He had to get on. There was work to be done.

George waved to a boy playing in a field and the boy waved back. With the contact of their eyes, the visitor was inside the boy's mind.

THE boy had a dog. It was a great, lumbering mass of affection, a shaggy, loving, prankish beast. A protector and a playmate, strong and gentle.

Now that the visitor was in the boy's mind, he adored the animal, and the dog worshiped him.

He fought to be rational. "Come now," he told himself, "don't get carried away." He attempted control. A simple thing. He would have the boy pull the dog's ear, gently. He concentrated, suggested. But all his efforts were thwarted. The boy leaped

at the dog, grabbed it around the middle. The dog responded, prancing free.

The visitor gave up. He relaxed.

Great waves of mute, suffocating love enveloped him. He swam for a few minutes in a pool of joy, as the boy and dog wrestled, rolled over each other in the tall grass, charged ferociously with teeth bared and growls issuing from both throats, finally to subside panting and laughing on the ground while the clouds swept majestically overhead across the blue sky.

He could swear the dog was laughing, too.

As they lay there, exhausted for the moment, a young woman came upon them. The visitor saw her looking down at them, the soft breeze tugging at her dark hair and skirt. Her hands were thrust into the pockets of her jacket. She was barefoot and she wriggled her toes so that blades of grass came up between them.

"Hello, Jimmy," she said. "Hello, Max, you old monster."

The dog thumped the ground with his tail.

"Hello, Mrs. Tanner," the boy said. "How's the baby coming?"

The girl smiled. "Just fine, Jimmy. It's beginning to kick a little now. It kind of tickles. And you know what?"

"What?" asked Jimmy. The

visitor in the boy's mind wanted to know, too.

"I hope it's a boy, and that he grows up to be just like you."

"Aw." The boy rolled over and hid his face in the grass. Then he peered around. "Honest?"

"Honest," she said.

"Gee whiz." The boy was so embarrassed that he had to leave. "Me and Max are going down to the swimmin' hole. You wanna come?"

"No, thanks. You go ahead. I think I'll just sit here in the Sun for a while and watch my toes curl."

As they said good-by, the visitor traveled to the new mind.

WITH the girl's eyes, he saw the boy and the dog running across the meadow and down to the stream at the edge of the woods.

The traveler experienced a sensation of tremendous fondness as he watched them go.

But he mustn't get carried away, he told himself. He must make another attempt to take command. This girl might be the one he could influence. She was doing nothing active; her mind was relaxed.

The visitor bent himself to the task. He would be cleverly simple. He would have her pick a daisy. They were all around at her feet. He concentrated. Her

gaze traveled back across the meadow to the grassy knoll on which she was standing. She sat. She stretched out her arms behind her and leaned back on them. She tossed her hair and gazed into the sky.

She wasn't even thinking of the daisy.

Irritated, he gathered all his powers into a compact mass and hurled them at her mind.

But with a swoop and a soar, he was carried up and away, through the sweet summer air, to a cloud of white softness.

This was not what he had planned, by any means.

A steady, warm breeze enveloped him and there was a tinkle of faraway music. It frightened him and he struggled to get back into contact with the girl's mind. But there was no contact. Apparently he had been cast out, against his will.

The forces of creation buffeted him. His dizzying flight carried him through the clean air in swift journey from horizon to horizon, then up, up and out beyond the limits of the atmosphere, only to return him in a trice to the breast of the rolling meadow. He was conscious now of the steady growth of slim green leaves as they pressed confidently through the nurturing Earth, of the other tiny living things in and on the Earth, and the heartbeat of the

Earth itself, assuring him with its great strength of the continuation of all things.

Then he was back with the girl, watching through her eyes a butterfly as it fluttered to rest on a flower and perched there, gently waving its gaudy wings.

He had not been cast out. The young woman herself had gone on that wild journey to the heavens, not only with her mind, but with her entire being, attuned to the rest of creation. There was a continuity, he realized, a oneness between herself, the mother-to-be, and the Universe. With her, then, he felt the stirrings of new life, and he was proud and content.

He forgot for the moment that he had been a failure.

THE soft breeze seemed to turn chill. The Sun was still high and unclouded, but its warmth was gone. With the girl, he felt a prickling along the spine. She turned her head slightly and, through her eyes, he saw, a few yards away in tall grass, a creeping man.

The eyes of the man were fixed on the girl's body and the traveler felt her thrill of terror. The man lay there for a moment, hands flat on the ground under his chest. Then he moved forward, inching toward her.

The girl screamed. Her terror

gripped the visitor. He was helpless. His thoughts whirled into chaos, following hers.

The eyes of the creeping man flicked from side to side, then up. The visitor quivered and cringed with the girl when she screamed again. As the torrent of frightened sound poured from her throat, the creeping man looked into her eyes. Instantly the visitor was sucked into his mind.

It was a maelstrom. A tremendous conflict was going on in it. One part of it was urging the body on in its fantastic crawl toward the young woman frozen in terror against the sky. The visitor was aware of the other part, submerged and struggling feebly, trying to get through with a message of reason. But it was handicapped. The visitor sensed these efforts being nullified by a crushing weight of shame.

The traveler fought against full identification with the deranged part of the mind. Nevertheless, he sought to understand it, as he had understood the other minds he'd visited. But there was nothing to understand. The creeping man had no plan. There was no reason for his action.

The visitor felt only a compulsion which said, "You must! You must!"

The visitor was frightened. And then he realized that he was less frightened than the man was. The

terror felt by the creeping man was greater than the fear the visitor had experienced with the girl.

There were shouts and barking. He heard the shrill cry of a boy. "Go get him, Max!"

There was a squeal of brakes from the road and a pounding of heavy footsteps coming toward them.

With the man, the visitor rose up, confused, scared. A great shaggy weight hurled itself and a growling, sharp-toothed mouth sought a throat.

A voice yelled, "Don't shoot! The dog's got him!"

Then blackness.

MERSEY." The voice summoned the visitor, huddling in a corner of the deranged mind, fearing contamination.

The eyes opened, looked up at the ceiling of a barred cell.

"Dr. Cloyd is here to see you," the voice said.

The visitor felt the mind of his host seeking to close out the words and the world, to return to sheltering darkness.

There was a rattle of keys and the opening of an iron door.

The eyes opened as a hand shook the psychotic Mersey by the shoulder. The visitor sought escape, but the eyes avoided those of the other.

"Come with me, son," the doc-

tor's voice said. "Don't be frightened. No one will hurt you. We'll have a talk."

Mersey shook off the hand on his shoulder.

"Drop dead," he muttered.

"That wouldn't help anything," the doctor said. "Come on, man."

Mersey sat up and, through his eyes, the traveler saw the doctor's legs. Were they legs or were they iron bars? The traveler cringed away from the mad thought.

A room with a desk, a chair, a couch, and sunlight through a window. Crawling sunlit snakes. The visitor shuddered. He sought the part of the mind that was clear, but he sought in vain. Only the whirling chaos and the distorted images remained now.

There was a pain in the throat and with Mersey he lifted a hand to it. Bandaged—gleaming teeth and a snarling animal's mouth—fear, despair and hatred. With the prisoner, he collapsed on the couch.

"Lie down, if you like," said Dr. Cloyd's voice. "Try to relax. Let me help you."

"Drop dead," Mersey replied automatically. The visitor felt the tenseness of the man, the unreasoning fear, and the resentment.

But as the man lay there, the traveler sensed a calming of the turbulence. There was an urgent

rational thought. He concentrated and tried to help the man phrase it.

"The girl—is she all right? Did I . . . ?"

"She's all right." The doctor's voice was soothing. It pushed back the shadows a little. "She's perfectly all right."

The visitor sensed a dulled relief in Mersey's mind. The shadows still whirled, but they were less ominous. He suggested a question, exulted as Mersey attempted to phrase it: "Doctor, am I real bad off? Can . . . ?"

But still the shadows.

"We'll work together," said the doctor's voice. "You've been ill, but so have others. With your help, we can make you well."

The traveler made a tremendous effort. He urged Mersey to say: "I'll help, doctor. I want to find peace."

But then Mersey's voice went on: "I must find a new home. We need a new home. We can't stay where we are."

THE traveler was shocked at the words. He hadn't intended them to come out that way. Somehow Mersey had voiced the underlying thoughts of his people. The traveler sought the doctor's reaction, but Mersey wouldn't look at him. The man's gaze was fixed on the ceiling above the couch.

"Of course," the doctor said. His words were false, the visitor realized; he was humoring the madman.

"We had so much, but now there is no future," Mersey said. The visitor tried to stop him. He would not be stopped. "We can't stay much longer. We'll die. We must find a new world. Maybe you can help us."

Dr. Cloyd spoke and there was no hint of surprise in his voice.

"I'll help you all I can. Would you care to tell me more about your world?"

Desperately, the visitor fought to control the flow of Mersey's words. He had opened the gate to the other world—how, he did not know—and all of his knowledge and memories now were Mersey's. But the traveler could not communicate with the disordered mind. He could only communicate through it, and then involuntarily. If he could escape the mind . . . but he could not escape. Mersey's eyes were fixed on the ceiling. He would not look at the doctor.

"A dying world," Mersey said. "It will live on after us, but we will die because we have finished. There's nothing more to do. The Change is upon us, and we must flee it or die. I have been sent here as a last hope, as an emissary to learn if this world is the answer. I have traveled among

you and I have found good things. Your world is much like ours, physically, but it has not grown as fast or as far as ours, and we would be happy here, among you, if we could control."

THE words from Mersey's throat had come falteringly at first, but now they were strong, although the tone was flat and expressionless. The words went on:

"But we can't control. I've tried and failed. At best we can co-exist, as observers and vicarious participants, but we must surrender choice. Is that to be our destiny—to live on, but to be denied all except contemplation—to live on as guests among you, accepting your ways and sharing them, but with no power to change them?"

The traveler shouted at Mersey's mind in soundless fury: "Shut up! Shut up!"

Mersey stopped talking.

"Go on," said the doctor softly. "This is very interesting."

"Shut up!" said the traveler voicelessly, yet with frantic urgency.

The madman was silent. His body was perfectly still, except for his calm breathing. The visitor gazed through his eyes in the only possible direction—up at the ceiling. He tried another command. "Look at the doctor."

With that glance, the visitor told himself, he would flee the crazed mind and enter the doctor's. There he would learn what the psychiatrist thought of his patient's strange soliloquy — whether he believed it, or any part of it.

He prayed that the doctor was evaluating it as the intricate ravaging of delusion.

SLOWLY, Mersey turned his head. Through his eyes, the visitor saw the faded green carpet, the doctor's dull-black shoes, his socks, the legs of his trousers. Mersey's glance hovered there, around the doctor's knees. The visitor forced it higher, past the belt around a tidy waist, along the buttons of the opened vest to the white collar, and finally to the kindly eyes behind gold-rimmed glasses.

Again he had commanded this human being and had been obeyed. The traveler braced himself for the leap from the tortured mind to the sane one.

But his gaze continued to be that of Mersey.

The gray eyes of the doctor were on his patient. Intelligence and kindness were in those eyes, but the visitor could read nothing else.

He was caught, a prisoner in a demented mind. He felt panic. This must be the mind-screen

he'd been warned about.

"Look down," the visitor commanded Mersey. "Shut your eyes. Don't let him see me."

But Mersey continued to be held by the doctor's eyes. The visitor cowered back into the crazed mental tangle.

Gradually, then, his fear ebbed. There was more likelihood that Cloyd did not believe Mersey's words than that he did. The doctor treated hundreds of patients and surely many of them had delusions as fanciful as this one might seem.

The traveler's alarm simmered down until he was capable of appreciating the irony of the situation.

But at the same time, he thought with pain, "Is it our fate that of all the millions of creatures on this world, we can establish communication only through the insane? And even then to have only imperfect control of the mind and, worse, to have it become a transmitter for our most secret thoughts?"

It was heartbreakingly.

Dr. Cloyd broke the long silence. Pulling at his ear, he spoke calmly and matter-of-factly:

"Let me see if I understand your problem, Mersey. You believe yourself to be from another world, from which you have traveled, although not physically. Your world is not a material one,

as far as its people are concerned. Your civilization is a mental one, which has been placed in danger. You must resettle your people, but this cannot be done here, on Earth, except in the minds of the mentally ill—and that would not be a satisfactory solution. Have I stated the case correctly?"

"Yes," Mersey's voice said over the traveler's mental protests. "Except that it is not a 'case,' as you call it. I am not Mersey. He is merely a vehicle for my thoughts. I am not here to be treated or cured, as the human being Mersey is. I'm here with a life-or-death problem affecting an entire race, and I would not be talking to you except that, at the moment, I'm trapped and confused."

THE madman was doing it again, the traveler thought helplessly—spilling out his knowledge, betraying him and his kind. Was there no way to muffle him?

"I must admit that I'm confused myself," Dr. Cloyd said. "Humor me for a moment while I think out loud. Let me consider this in my own framework, first, and then in yours, without labeling either one absolutely true or false.

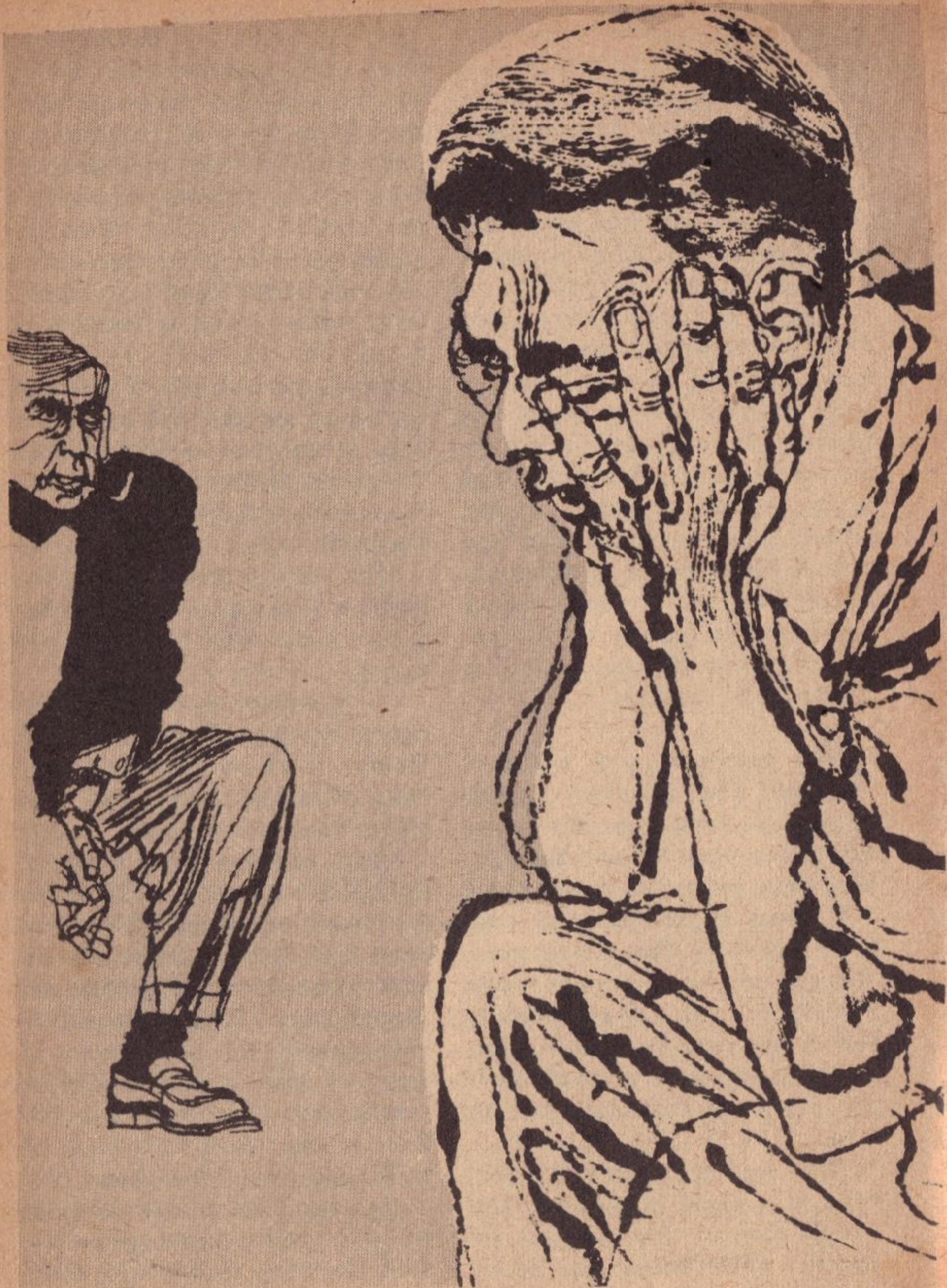
"You see," the doctor went on, "this is a world of vitality. My world—Earth. Its people are strong. Their bodies are devel-

oped as well as their minds. There are some who are not so strong, and some whose minds have been injured. But for the most part, both the mind and the body are in balance. Each has its function, and they work together as a coordinated whole. My understanding of your world, on the other hand, is that it's in a state of imbalance, where the physical has deteriorated almost to extinction and the mind has been nurtured in a hothouse atmosphere. Where, you might say, the mind has fed on the decay of the body."

"No," said Mersey, voicing the traveler's conviction. "You paint a highly distorted picture of our world."

"I theorize, of course," Dr. Cloyd agreed. "But it's a valid theory, based on intimate knowledge of my own world and what you've told me of yours."

"You make a basic error, I think," Mersey said, speaking for the unwilling visitor. "You assume that I have been able to make contact only with this deranged mind. That is wrong. I have shared the experiences of many of you—a man, a boy, a woman about to bear a child. Even a cat. And with each of these, my mind has been perfectly attuned. I was able to share and enjoy their experiences, their pleasures, to love with them



and to fear, although they had no knowledge of my presence.

"Only since I came to this poor mind have I failed to achieve true empathy. I have been shocked by his madness and I've tried to resist it, to help him overcome it. But I've failed and it apparently has imprisoned me. Whereas I was able to leave the minds of the others almost at will, with poor Mersey I'm trapped. I can't transfer to you, for instance, as I could normally from another. If there's a way out, I haven't found it. Have you a theory for this?"

In spite of his distress at these revelations, the traveler was intrigued, now that they had been voiced for him, and he was eager to hear Dr. Cloyd's interpretation of them.

The psychiatrist took a pipe out of his pocket, filled it, lighted it and puffed slowly on it until it was drawing well.

"Continuing to accept your postulate that you're not Mersey, but an alien inhabiting his mind," the doctor said finally, "I can enlarge on my theory without changing it in any basic way.

"Your world is not superior to ours, much as it may please you to believe that it is. Nature consists of a balance, and that balance must hold true whether in Sioux City, or Mars, or in the fourth dimension, or in your

world, wherever that may be. Your world is out of balance. Evidently it has been going out of balance for some time.

"Your salvation lies not in further evolution in your world—since your way of evolving proved wrong, and may prove fatal—but in a change in course, back along the evolutionary path to a society which developed naturally, with the mind and the body in balance. That society is the one you have found here, in our world. You found it pleasant and attractive, you say, but that doesn't mean you're suited to it.

"Nature's harsh rules may have operated to let you observe a way of life here that you enjoy, but to exclude you otherwise—except from a mind that is not well. In nature's balance, it could be that the refuge on this world most closely resembling your needs is in the mind of the psychotic. One conclusion could be that your race is mentally ill—by our standards, if not by yours—and that the type of person here most closely approximating your way of life is one with a disordered mind."

DR. Cloyd paused. Mersey had no immediate reply.

The traveler made use of the silence to consider this plausible, but frightening theory. To accept the theory would be to ac-

cept a destiny of madness here on this world, although the doctor had been kind enough to draw a distinction between madness in one dimension and a mere lack of natural balance in another.

Mersey again seized upon the traveler's mind and spoke its thoughts. But as he spoke, he voiced a conclusion which the traveler had not yet admitted even to himself.

"Then the answer is inescapable," Mersey said, his tone flat and unemotional. "It is theoretically possible for all of our people to migrate to this world and find refuge of a sort. But if we established ourselves in the minds of your normal people, we'd be without will. As mere observers, we'd become assimilated in time, and thus extinguished as a separate race. That, of course, we could not permit. And if we settled in the minds most suitable to receive us, we would be in the minds of those who by your standards are insane—whose destiny is controlled by the others. Here again we could permit no such fate.

"That alone would be enough to send me back to my people to report failure. But there is something more—something I don't think you will believe, for all your ability to synthesize acceptance of another viewpoint."

"And what is that?"

"First I must ask a question. In speaking to me now, do you still believe yourself to be addressing Mersey, your fellow human being, and humoring him in a delusion? Or do you think you are speaking through him to me, the inhabitant of another world who has borrowed his mind?"

THE doctor smiled and took time to relight his pipe.

"Let me answer you in this way," he said. "If I were convinced that Mersey was merely harboring a delusion that he was inhabited by an alien being, I would accept that situation clinically. I would humor him, as you put it, in the hope that he'd be encouraged to talk freely and perhaps give me a clue to his delusion so I could help him lose it. I would speak to him—or to you, if that were his concept of himself—just as I am speaking now.

"On the other hand, if I were convinced by the many unusual nuances of our conversation that the mind I was addressing actually was that of an alien being—I would still talk to you as I am talking now."

The doctor smiled again. "I trust I have made my answer sufficiently unsatisfactory."

The visitor's reaction was spoken by Mersey. "On the con-

trary, you have unwittingly told me what I want to know. You'd want your answer to be satisfactory if you were speaking to Mersey, the lunatic. But because you'd take delight in disconcerting me by scoring a point—something you wouldn't do with a patient—you reveal acceptance of the fact that I am not Mersey. Your rules would not permit you to give him an unsatisfactory answer."

"Not quite," contradicted Dr. Cloyd, still smiling. "To Mersey, my patient, troubled by his delusion and using all his craft to persuade both of us of its reality, the unsatisfactory answer would be the satisfactory one."

MERSEY'S voice laughed. "Dr. Cloyd, I salute you. I will leave your world with a tremendous respect for you—and completely unsure of whether you believe in my existence."

"Thank you."

"I am leaving, you know," Mersey's voice replied.

The traveler by now was resigned to letting the patient be his medium and speak his thoughts. Thus far, he had spoken them all truly, if somewhat excessively. The traveler thought he knew why, now, and expected Mersey to voice the reason for him very shortly. He did.

"I'm leaving because I must report failure and advise my people to look elsewhere for a new home. Part of the reason for that failure I haven't yet mentioned:

"Although it might appear that I, the visitor, am manipulating Mersey to speak the thoughts I wished to communicate, the facts are almost the opposite. My control over either Mersey's body or mind is practically nil.

"What you have been hearing and what you hear even now are the thoughts I am thinking—not necessarily the ones I want you to know. What has happened is this, if I may borrow your theory:

"My mind has invaded Mersey's, but his human vitality is too strong to permit him to be controlled by it. In fact, the reverse is true. His vitality is making use of my mind for its own good, and for the good of your human race. His own mind is damaged badly, but his healthy body has taken over and made use of my mind. It is using my mind to make it speak against its will—to speak the thoughts of an alien without subterfuge, as they actually exist in truth. Thus I am helplessly telling you all about myself and the intentions of my people.

"What is in operation in Mersey is the human body's instinct

of self-preservation. It is utilizing my mind to warn you against that very mind. Do you see? That would be the case, too, if a million of us invaded a million minds like Mersey's. None of us could plot successfully against you, if that were our desire—which, of course, it is—because the babbling tongues we inherited along with the bodies would give us away."

The doctor no longer smiled. His expression was grave now.

"I don't know," he said. "Now I am not sure any longer. I'm not certain that I follow you—or whether I want to follow you. I think I'm a bit frightened."

"You needn't be. I'm going. I'll say good-by, in your custom, and thank you for the hospitality and pleasures your world has given me. And I suppose I must thank Mersey for the warning of doom he's unknowingly given my people, poor man. I hope you can help him."

"I'll try," said Dr. Cloyd, "though I must say you've complicated the diagnosis considerably."

"Good-by. I won't be back, I promise you."

"I believe you," said the doctor. "Good-by."

Mersey slumped back on the couch. He looked up at the ceiling, vacantly.

FOR a long time there was no sound in the room.

Then the doctor said: "Mersey."

There was no answer. The man continued to lie there motionless, breathing normally, looking at the ceiling.

"Mersey," said the doctor again. "How do you feel?"

The man turned his head. He looked at the doctor with hostility, then went back to his contemplation of the ceiling.

"Drop dead," he muttered.

—RICHARD WILSON

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For Your Information

By **WILLY LEY**

The Ice Age (II)

NOT just "once upon a time," but at least three times in the course of the last 600 million years, our planet experienced what is now called an Ice Age, a period of glaciers in areas normally free of them.

The first of these three glaciations, only very incompletely and sketchily known to us, took place in the earliest days of the old, old Cambrian Period. More likely it was at a time which we would call "pre-Cambrian," if



there were a hard and fast rule for placing the dividing line, and if we could date such distant events with any precision.

The next glaciation, of which we know much more, took place 400 million years later, during the Permian Period.

This period followed the days of the endless—both in expanse and in duration—swampy forests of the Carboniferous Period which produced most of our coal beds. The Permian glaciation was followed, however, by the three periods which are often lumped together under the term "The Age of Reptiles"—the Triassic, Jurassic and Cretaceous Periods—all in all, about 135 million years long and decidedly warm. The "Age of Mammals" or Tertiary Period—the name is a hangover from the early days of geology which assumed a total of four geological periods, of which this was the third—was of a total duration of 60 million years and also obviously warm in character.

And then, after a good round 200 million years of warm climate, there came the recent Ice Age which ended only a few thousand years before the very oldest records of human history.

THE great question, asked ever since even a few of the facts just recited became known, was

"what caused it?" A set of answers which dominated thinking for quite some time was based on the simple reasoning that the Earth gets its heat from the Sun. Hence, if we did not get enough heat at one time, the Sun must have weakened temporarily, or else we, for reasons unknown, had been traveling in a different orbit.

In short, either the stove had not worked right or else we had been farther away from it.

Last month I gave a survey of these ideas and why they had failed to work out, sticking closely to the set of theories which had astronomical events in mind. Doing that, I had to disregard chronological order, else it would have been a confused story indeed.

Now for the set of theories which stayed on Earth. Just as there had been a simple-minded idea in the astronomical field (the Sun is burning out) there was an equally simple-minded thought in the geological department. After all, it was not only the Sun which was gradually cooling. The Earth was, too.

Once, the then current theory ran, the Earth had been a ball of hot gas and molten rock, a miniature sun. And although, because of its much smaller size, the Earth had formed a solid cool crust early in its career, it

had remained a miniature sun under that crust for a long time. In the days of the geological periods which were past, the crust did not only receive radiant heating from the ceiling, it was also supplied with heat from underneath. As that floor heating diminished, the crust grew cooler, for the Sun alone was not enough to produce the all-over tropical climate of the past.

The argument broke down as soon as that older glaciation of the Permian Period was discovered and confirmed. To make it completely absurd, somebody made a little calculation. Supposing that the heat from underneath was to provide as many calories to the surface as the Sun did, how soon would it become how hot if you dug down? The answer was that there would have to be almost red heat 35 feet below sea level—far from improving in growth, the roots of any large tree would be badly scorched.

SUBTERRANEAN heat was no answer. But, one might ask, granted that North America had had its Ice Age at the same time as northern Europe, and granted also that traces of an Ice Age had been found in the southern hemisphere, how could we be sure the Ice Age in the southern hemisphere had coin-

cided with that of the northern hemisphere?

It was this thought which intrigued Monsieur Alphonse Joseph Adhémar, in everyday life a professor of mathematics, and which led to one of the wildest hypotheses ever to be thrown at a usually patient public.

But we have to recall a few elementary facts first. As everybody has learned at some time or another, the Earth's axis is tilted to the plane of the Earth's orbit, and the orbit itself is not a precise circle but merely a near-circular ellipse. At the present time, the Earth is farthest from the Sun when the northern hemisphere has summer. The slightly longer distance matters little; the important thing is that the tilt of the axis favors the north at that time of the year.

In the south, things are reversed; the South Pole has summer when the Earth is closest to the Sun. That, however, also means that the Earth is moving a little faster. Therefore the South Polar summer, while potentially somewhat warmer, is slightly shorter; the north has slightly cooler but longer summers. Conversely, the south has a colder and longer winter.

Then there is the phenomenon of the procession of the equinoxes—we can't go into detail here—which has the result that, in

twenty-odd-thousand-year intervals, the other pole attains the favored position of the somewhat longer summers.

Adhémar advanced the idea that the Ice Age was simply the time when the North Pole was in the position which now applies to South Pole. During those regularly repeating cycles when the tilt of the axis pointed the northern hemisphere toward the Sun, while the Earth was closest, the north had long and cold winters. Though the summers were hotter, they were too short to melt the ice which had accumulated. And the more the ice accumulated, winter after winter, the weaker the effect of the summer on that accumulation.

So far, this was, for the factual knowledge then available, a theory that could be seriously considered. But Adhémar did not stop there. As the ice accumulated around the unfavored pole, its weight shifted the center of gravity of the planet. This would cause the waters of the surface to assemble near the cold pole. Look at the map—the high north is largely land, but the massive ice of the south is surrounded by thousands of miles of sea water. Then, as the severity of the cold season slowly shifts from one pole to the other, the formerly ice pole melts clear. One summer the last ice floe disappears down

there . . . and suddenly the center of gravity of the planet shifts and the waters hurry in an indescribable flood to the other pole.

During the last shift of the waters to the north, the mammoths were carried from their tropical homeland into the ice of Siberia, where they managed to live for one season—Adhémar could not know just how well the mammoths were adapted to a cold climate in every detail of their physiology—and the last water shift to the south was probably the Flood of the Bible. The next shift, Adhémar predicted in 1842, would take place 6300 years hence.

WHILE Adhémar erred on every count, he had introduced an idea which many a geologist tried to utilize later on: the notion that what *looks* like an ice age *may* just have been normal polar winter. But the poles may have been where they are not now.

About 1883, the Urania Observatory in Berlin had reported after considerable hesitation that its own latitude seemed to shift a bit. The amount was unimportant and hardly detectable. But the fact itself seemed—they said “seemed”—correct. The observatory of Pulkova in Russia was the first to corroborate the

strange news. Prague followed suit. Just to make sure, an astronomer, Dr. Markuse, was shipped halfway around the world to the Sandwich Islands to make measurements from an antipodal point.

It was true. The North Pole—and, of course, the South Pole, too—moves a little, some 70 feet away from its theoretical location. It is not a straight-line movement, but a kind of shivering—and no jokes about the low temperature, please.

Well, if the poles move a little now, they might have moved much more in the past. Look at a map again, a world map this time, or better still, a globe. Supposing that at one time the whole Earth had been turned in such a way that the North Pole had occupied the southern tip of Greenland. That would obviously have meant an Ice Age for both North America and Europe. Supposing that in the preceding geological period, the North Pole had been located under what we now call 60 degrees latitude in northeastern Asia. At that time the equator would have run through Texas and Louisiana on this side of the Atlantic Ocean, and through Spain and Greece on the other side.

It would certainly have been tropical in North America and Europe then.

THIS simple example which just shifts the pole along the 40th meridian does not work out in reality. For Ireland, England and North Germany, and, of course, Scandinavia, were covered by glaciers, while France and Spain were not.

But this was the general idea, set forth, for the first time to my knowledge, in the Annual Report for the Year 1901 of the Society for Geography in Dresden. The author of this particular paper was an engineer by the name of Paul Reibisch.

It seemed to Reibisch that the whole Earth performed a very slow pendulum movement, swinging in the course of geological periods north and south, bringing different continents into the tropics and under the poles. If you want to visualize what he meant, take a globe and hold it between two fingertips which are placed on Sumatra and Ecuador. Turn the globe back and forth. Now, if you can imagine that the ice cap of the pole slithers back and forth over the continents and seas, you know the gist of Reibisch's theory.

Reibisch followed up his original paper with two more publications in 1905 and 1907 and, in the latter year, another book appeared which enthusiastically supported Reibisch. Its author was Dr. Heinrich Simroth, pro-

essor of zoology at the University of Leipzig.

Prof. Simroth had tried to coordinate Reibisch's geological ideas with his own knowledge of zoology, specifically the distribution of the animals over the globe, and had satisfied himself that everything worked out wonderfully.

Simroth did something else. Reibisch had introduced that pendulum movement as a fact; Simroth tried to find the reason for it. His solution: a second moon of Earth had struck several hundred million years before the first glaciation in pre-Cambrian days. This shock had caused the first movement, and ever since then, the magnetic field of the Sun, acting upon the magnetic field of the Earth, had tried to dampen the pendulum movement, until only the slight shivering of the poles is left now.

Very ingenious, but it has nothing to do with reality. Even forgetting Simroth's "elaborations," Reibisch's pendulum just does not work out. For one thing, while the European glaciation would fall between the Tertiary Period and the present, the North American glaciation would fall into the Tertiary. Geologists were quite sure even in 1907 that they were simultaneous. Now, thanks to the carbon-14 method, we know they were.

BUT there was one more thought. Possibly it was not the Earth as a whole which made weird movements, but only the Earth's crust or portions of the crust, floating upon the heavier magma of the next deeper layer. When you voice this thought now, everybody will think at once of Prof. Alfred Wegener's theory of the floating continents, an intriguing idea about which one may say that it *almost* explains things. But not quite; there are lots of difficulties left. Dr. Wegener, however, was not the first to make the crust of the Earth wander about the planet.

The first, in 1886, had been a learned and careful outsider, Karl Count Löffelholz von Colberg, who offered this thought as a possibility. The next one to make this suggestion was (strange coincidence of names) Father Kolberg, S. J., and the third was Father Damian Kreichgauer, S.V.D., who some fifty years ago published his *Die Aequatorfrage in der Geologie* which may be translated as "The Position of the Equator in Geological History." Father Kreichgauer was interested in the equator as the title shows, but if you move the equator, you move the poles, too.

Interestingly enough, Father Kreichgauer—who wrote before Reibisch published his works, even though the publication date

is a little later—also assumes that northern South America and the East Indies shifted little, if at all. Otherwise the equator is assumed to have almost “flopped over” in the course of geological history.

Since Father Krichgauer's continents can wander off obliquely, if needed, things work out far better than with Reibisch's rigid system. But even so the glaciations of East and West cannot be made to coincide. In reality, they did.

ALL these ideas were not really explanations. They were attempts to explain the Ice Ages away, to show that unknown factors led to systematic mistakes in interpretation of the evidence. But since they all failed, the old assumption that the whole Earth was temporarily cooler is still the simplest and most logical. Nor did it have to be very much cooler. Melchior Neumayr of Vienna showed that a general reduction of the average temperature by just 6 to 8 degrees Fahrenheit is sufficient.

If every noon and every midnight is 6 to 8 degrees F. cooler than now for a number of centuries, we'll get the most beautiful glaciation, both in the north and in the south, both east and west—and no nonsense about shifting centers of gravity and

second moons hitting us below the equator.

One rather obvious thought centers upon the enormous cosmic dust clouds we see in interstellar space. If our sun with its planetary system wandered into such a cloud, the dust would absorb some of the solar radiation and Earth would receive less heat. It is really surprising that it took so long until somebody actually said so, yet the idea did not reach print until about 30 years ago with a paper by the astronomer Prof. Nölke.

It seems simple, but the difficulties are enormous.

The cosmic dust would absorb solar radiation, all right. It would also reflect radiation which would normally miss the Earth. The final result might well be an increase of radiation reaching us! (In fact, the British Col. Delauney, writing at about the same time as Nölke, took this position.) More important, the dust would fuel the Sun, increasing the output of heat.

It is conceivable that you might wiggle through by assuming a density of dust in space of just the right amount to act as a shield without increasing the Sun's output more than the shielding. But since the last glaciers vanished only 10,000 years ago, it would be a reasonable demand to have the cosmic cloud

which caused the Ice Age pointed out in the sky.

More than thirty years ago, the geologist Geinitz, who could be considered the foremost authority on all the theories relating to the Ice Age, wrote in the introduction to a heavy volume on this subject: "The causes of the Ice Age are unknown." Unfortunately, he could use the same sentence if he wrote now.

But there is one more theory which I'll save for the next month. It cannot be proved, but it might be true in principle.

MORE "PI"

THE item on "pi" brought in a surprisingly large number of letters, among them six from correspondents who could not figure out just how a sentence about alcoholic drinks and quantum mechanics was supposed to help them remember the value of "pi" to 14 decimal places. I also received one letter (from Peter J. Sutro of Oklahoma City) in which he predicted that some readers would ask that question. I had to admit to Mr. Sutro that this was my fault.

The clue is, of course, the number of letters in every word. I had taken it for granted that the readers would catch on, if not at once, at least after about five minutes had gone by. Now I

assume that everybody but those six readers did, which isn't at all bad.

An informative letter about "pi" came from Dr. James Stokley of General Electric's Research Laboratory. First of all, Dr. Stokley confirmed that the mnemonic I quoted was actually coined by Sir James Jeans; it appeared originally in a letter to *Nature* 25 years ago over the initials J.H.J., which were those of Sir James.

Dr. Stokley also informed me that the value of "pi" is now known to 2040 places. Only thirty years ago, that would have been the lifetime work of a mathematician, but times have changed. The calculation was accomplished by a group of researchers at the Aberdeen Proving Ground under W. Barkley Fritz. Working on their own time over the Fourth of July weekend in 1949, and using the ENIAC computer, they not only derived the value of "pi" for many more places than ever before, but also calculated the value of "e" to 2556 places. Anybody who wants to know more about this, please consult vol. 4, p. 11 (June 1950) of the *Mathematical Tables and Aids to Computation*, published by the National Research Council.

Several correspondents — first one in was William Vickrey of

552 Riverside Drive, NYC—sent me another mnemonic for “pi” which is good for 30 places and reads:

Now I, even I, would celebrate
In rhymes inapt, the great
Immortal Syracusan, rivaled nevermore
Who, in his wondrous lore,
Passed on before,
Left men his guidance
How to circles mensurate.

My personal feeling about this poem is that it would be easier to memorize “pi” to 30 places directly. Acting under the conviction that one bad poem deserves another, I replied with the French version which reads:

Que j'aime à faire apprendre un nombre utile aux sages!
Immortel Archimède, artiste ingénieur,
Qui de ton jugement peut priser la valeur?
Pour moi, ton problème eut de pareils avantages.

For good measure, I added a German version, constructed in 1878 by the mathematician Weinmeister:

Wie o! dies π ,
Macht ernstlich so vielen viele Müh',
Lernt immerhin, Jünglinge, leichte
Verselein,
Wie so zum Beispiel dies dürfte zu
merken sein.

When I thought it was all over, I received a stern-sounding postcard from Bill Powers of 111

E. Oak Street in Chicago, Ill., reading: “I wish I could recapture my memory about Sir Jeans’ diabolic mnemonics! However, invention now of any reliable, easy phrase is beyond what shy and fumbling aid my present intellect gives.”

Admittedly very fine and clever and certainly worth publication. But I have yet to find a case where 3.1416 wasn’t good enough.

—WILLY LEY

ANY QUESTIONS?

Space, we are told, is swarming with meteors. What is their origin?

Robert B. Godwin
2539 Lyndale Ave. So.
Minneapolis 5, Minn.

Astronomers are pretty much convinced by now that the overwhelming majority of all the meteorites which we encounter have their origin in the Asteroid Belt between Mars and Jupiter.

They are believed to originate from collisions, most of them glancing blows, between the smaller asteroids. Since such glancing blows must also impart velocity components to the fragments which are quite different from the orbits of the two asteroids that collided, the fragments must assume entirely different orbits. In a large num-

ber of cases, these new orbits will lead out of the Belt.

If this reasoning is correct, meteorites should be exceedingly rare beyond Jupiter.

In science fiction it is accepted as a fact that hard radiation causes mutations. If this is true, why have there been no known cases of mutation from the Hiroshima bomb?

Could it be that the radiation caused sterility instead?

Tony Stieber
6520 West 83rd St.
Los Angeles 45, Calif.

It is a fact that hard radiation causes mutations and this has been proved in the laboratory with fast-breeding fruit flies (*Drosophila melanogaster*). But it is also true that Hiroshima and Nagasaki did not produce a flood of human mutants.

There are two guesses in addition to your own:

One is that the resistance to mutation-causing radiation is much higher in mammals than it is in insects.

The other is that the mutations were so extreme that they could not have lived and thus they were miscarried.

When we send manned rockets out, first to the Moon and then to Mars and Venus, we have to

include fuel for the return trip. It might take us years longer to develop a round-trip fuel and rocket than a one-way fuel and round-trip rocket. I would like to know the chances of finding fuels on the Moon, Mars and Venus, respectively.

David Shear
409 Battery Lane
Bethesda 14, Md.

It is highly unlikely that we would find substances which are raw materials for fuels on the Moon. I can't say that about Venus because its surface conditions are still unknown.

Mars has water and sunlight. By means of solar mirrors operating turbo-generators, we could break the water down into hydrogen and oxygen and liquefy these two gases. They would be a usable fuel combination. Or else we could only keep the oxygen in its pure form and convert the hydrogen, utilizing atmospheric nitrogen, into hydrazine. Hydrazine has many advantages of pure hydrogen, all of them falling under the heading of ease in handling.

But such processing, which amounts to a storing of solar energy, is quite complicated. When the time comes, we'll probably calculate twice whether it wouldn't be simpler to carry along the return fuel.

PROTT

By MARGARET ST. CLAIR

The Kinsey of space was what

he considered himself . . . and

his was not a sterile labor!

Illustrated by JOHN FAY

READ IT," said the spaceman. "You'll find it interesting—under the circumstances. It's not long. One of the salvage crews found it tied to a signal rocket just outside the Asteroid Belt. It'd been there quite a while.

"I thought of taking it to somebody at the university, a historian or somebody, but I don't suppose they'd be interested. They don't have any more free time than anybody else."

He handed a metal cylinder to

Fox, across the table, and ordered drinks for them both. Fox sipped from his glass before he opened the tube.

"Sure you want me to read it now?" he asked. "Not much of a way to spend our free time."

"Sure, go ahead and read it. What difference does it make?"

So Fox spread out the emtex sheets. He began to read.

DATING a diary in deep space offers special problems. Philosophic problems, I mean—that

immense "When is now?" which, vexatious enough within a solar system or even on the surface of a planet, becomes quite insoluble in deep except empirically or by predicating a sort of super-time, an enormous Present Moment which would extend over everything. And yet a diary entry must be dated, if only for convenience. So I will call today Tuesday and take the date of April 21 from the gauges.

Tuesday it is.

On this Tuesday, then, I am quite well and cheerful, snug and comfortable, in the *Ellis*. The *Ellis* is a model of comfort and convenience; a man who couldn't be comfortable in it couldn't be comfortable anywhere. As to where I am, I could get the precise data from the calculators, but I think, for the casual purposes of this record, it's enough to say that I am almost at the edges of the area where the prott are said to abound. And my speed is almost exactly that at which they are supposed to appear.

I said I was well and cheerful. I am. But just under my euphoria, just at the edge of consciousness, I am aware of an intense loneliness. It's a normal response to the deep space situation, I think. And I am upborne by the feeling that I stand on the threshold of unique scientific discoveries.

THURSDAY the 26th (my days are more than twenty-four hours long). Today my loneliness is definitely conscious. I am troubled, too, by the fear that perhaps the prott won't—aren't going to—put in an appearance. After all, their existence is none too well confirmed. And then what becomes of all my plans, of my smug confidence of a niche for myself in the hall of fame of good investigators?

It seemed like a brilliant idea when I was on Earth. I know the bursar thought so, too, when I asked for funds for the project. To investigate the life habits of a non-protoplasmic form of life, with special emphasis on its reproduction—excellent! But now?

Saturday, April 30. Still no prott. But I am feeling better. I went over my files on them and again it seems to me that there is only one conclusion possible: They exist.

Over an enormous sector in the depth of space, during many years, they have been sighted. For my own comfort, let's list the known facts about prott.

First, they are a non-protoplasmic form of life. (How could they be otherwise, in this lightless, heatless gulf?) Second, their bodily organization is probably electrical. Simmons, who was electrical engineer on the *Thor*, found

that his batteries showed discharges when prott were around. Third, they appear only to ships which are in motion between certain rates of speed. (Whether motion at certain speeds attracts them, or whether it is only at certain frequencies that they are visible, we don't know.) Fourth, whether or not they are intelligent, they are to some extent telepathic, according to the reports. This fact, of course, is my hope of communicating with them at all. And fifth, prott have been evocatively if unscientifically described as looking like big poached eggs.

On the basis of these facts, I've aspired to be the Columbus—or, more accurately, the Dr. Kinsey—of the prott. Well, it's good to know that, lonely and rather worried as I am, I can still laugh at my own jokes.

May 3rd. I saw my first prott. More later. It's enough for now: I saw my first prott.

May 4th. The *Ellis* has all-angle viewing plates, through 360 degrees. I had set up an automatic signal, and yesterday it rang. My heart thumping with an almost painful excitement, I ran to the battery of plates.

There it was, seemingly some five yards long, a cloudy, whitish thing. There was a hint of a large

yellow nucleus. Damned if the thing *didn't* look like a big poached egg!

I saw at once why everyone has assumed that prott are life-forms and not, for example, minute spaceships, robots, or machines of some sort. The thing had the irregular, illogical symmetry of life.

I stood goggling at it. It wasn't alarming, even in its enormous context. After a moment, it seemed to flirt away from the ship with the watery ease of a fish.

I waited hopefully, but it didn't come back.

MAY 4. No prott. Question: since there is so little light in deep space, how was I able to see it? It wasn't luminous.

I wish I had had more training in electronics and allied subjects. But the bursar thought it more important to send out a man trained in survey techniques.

May 5. No prott.

May 6. No prott. But I have been having very odd thoughts.

May 8th. As I half-implied in my last entry, the ideas I have been having (such odd ideas—they made me feel, mentally, as if some supporting membrane of my personality were being over-

strained) were an indication of the proximity of prott.

I had just finished eating lunch today when the automatic signal rang. I hurried to the viewers. There, perfectly clear against their jet-black background, were three prott. Two were almost identical; one was slightly smaller in size. I had retraced over and over in my mind the glimpse of the one prott I had had before, but now that three of them were actually present in the viewers, I could only stare at them. They're not alarming, but they do have an odd effect upon the mind.

After several tense seconds, I recovered my wits. I pressed a button to set the automatic photographic records going. I'd put in plates to cover the whole spectrum of radiant energy, and it will be interesting when I go to develop my pictures to see what frequencies catch the prott best. I also—this was more difficult—began to send out the basic "Who? Who? Who?" in which all telepathic communicators are trained.

I have become reasonably good at telepathy through practice, but I have no natural talent for it. I remember McIlwrath telling me jokingly, just before I left New York, that I'd never have trouble with one of the pitfalls of natural telepaths—transmitting a desired answer into the mind of

a subject by telepathy. I suppose any deficiency has some advantageous side.

I began to send out my basic "Who?" It may have been only a coincidence, but as soon as the fourth or fifth impulse had left my mind, all three prott slid out of the viewing plates. They didn't come back. It would seem that my attempts at communication alarmed them. I hope not, though.

When I was convinced that they would not return for a while, I began to develop my plates. Those in the range of visible light show the prott very much as they appear to the eye. The infra-red plates show nothing at all. But the ultra-violet-sensitive ones are really interesting.

Two of the prott appear as a network of luminous lines intricately knotted and braided. For some reason, I was reminded of the "elfish light" of Coleridge's water snakes, which "moved in tracks of shining white." The third prott, which I assume to have been the smaller one, gave an opaque, flattened-ovoid image, definitely smaller than that of its companions, with a round dark shadow in the center. This shadow would appear to be the large yellow nucleus.

Question: Do these photographic differences correspond to organizational differences? Prob-

ably, though it might be a matter of phase.

Further question: If the difference is in fact organizational, do we have here an instance of that specialization which, among protoplasmic creatures, would correspond to sex? It is possible. But such theorizing is bound to be plain guesswork.

May 9th (I see I gave up dating by days some while ago.). No prott. I think it would be of some interest if, at this point, I were to try to put down my impression of those "odd thoughts" which I believe the prott inspired in me.

In the first place, there is a reluctance. I didn't want to think what I was thinking. This is not because the ideas were in themselves repellent or disgusting, but because they were uncongenial to my mind. I don't mean uncongenial to my personality or my idiosyncrasies, to the sum of differences that make up "me," but uncongenial to the whole biological orientation of my thinking. The differences between protoplasmic and non-protoplasmic life must be enormous.

In the second place, there is a frustration. I said, "I didn't want to think what I was thinking," but it would be equally true to say that I *couldn't* think it. Hence, I suppose, that sensation

of ineffectuality.

And in the third place, there is a great boredom. Frustration often does make one feel bored, I suppose. I couldn't apprehend my own thoughts. But whenever I finally did, I found them boring. They were so remote, so incomprehensible, that they were uninteresting.

But the thoughts themselves? What were they? I can't say.

How confused all this is! Well, nothing is more tiresome than to describe the indescribable.

Perhaps it is true that the only creature that could understand the thoughts of a prott would be another prott.

MAY 10th. Were the "odd thoughts" the results of attempts on the protts' part to communicate with me? I don't think so. I believe they were near the ship, but out of "view-shot," so to speak, and I picked up some of their interpersonal communications accidentally.

I have been devoting a good deal of thought to the problem of communicating with them. It is too bad that there is no way of projecting a visual image of myself onto the exterior of the ship. I have Matheson's signaling devices, and next time—if there is a next—I shall certainly try them. I have little confidence in devices, however. I feel intui-

tively that it is going to have to be telepathy or nothing. But if they respond to the basic "who?" with flight . . . well, I must think of something else.

Suppose I were to begin the attempt at contact with a "split-question." "Splits" are hard for any telepath, almost impossible for me. But in just that difficulty, my hope of success might lie. After all, I suppose the prott flirted away from the ship at my "who?" because mental contact with me was painful to them.

Later. Four of them are here now. I tried a split and they went away, but came back. I am going to try something else.

May 11th. It worked. My "three-way split"—something I had only read about in journals, but that I would never have believed myself capable of—was astoundingly effective.

Not at first, though. At my first attempt, the prott darted right out of the viewers. I had a moment of despair. Then, with an almost human effect of hesitation, reluctance, and inclination, they came back. They clustered around the viewer. Once more I sent out my impulse; sweat was running down my back with the effort. And they stayed.

I don't know what I should have done if they hadn't. A split

is exhausting because, in addition to the three normal axes of the mind, it involves a fourth one, at right angles to all the others. A telepath would know what I mean. But a three-way split is, in the old-fashioned phrase, "lifting yourself up by your bootstraps." Some experts say it's impossible. I still have trouble believing I brought it off.

I did, however. There was a sudden rush, a gush, of communication. I'd like to try to get it down now, while it's still fresh in my mind. But I'm too tired. Even the effort of using the playback is almost beyond me. I've got to rest.

LATER. I've been asleep for four hours. I don't think I ever slept so soundly. Now I'm almost myself again, except that my hands shake.

I said I wanted to get the communication with the prott down while it was still fresh. Already it has begun to seem a little remote, I suppose because the subject matter was inherently alien. But the primary impression I retain of it is the gush, the suddenness. It was like pulling the cork out of a bottle of warm champagne which has been thoroughly shaken up.

In the middle, I had to try to maintain my mental balance in the flood. It was difficult; no won-

der the effort left me so tired. But I did learn basic things.

One: identity. The prott are individuals, and though their designations for themselves escape me, they have individual consciousness. This is not a small matter. Some protoplasmic life-forms have only group consciousness. Each of the four prott in my viewer was thoroughly aware of itself as distinct from the others.

Two: difference. The prott were not only aware of identity, they were aware of differences of class between themselves. And I am of the opinion that these differences correspond to those shown on my photographic plates.

Three: place. The prott are quite clearly conscious that they are *here* and not somewhere else. This may seem either trivial or so basic as not to be worth bothering with. But there are whole groups of protoplasmic life-forms on Venus whose only cognizance of place is a distinction between "me" and "not-me."

Four: time. For the prott, time is as it is for us, an irreversible flowing in one direction only. I caught in their thinking a hint of a discrimination between biological (for such a life-form? That is what it seemed) time and something else, I am not sure what.

Beyond these four basic things, I am unsure. I do feel, though it is perhaps overoptimistic of me, that further communication, communication of great interest, is possible. I feel that I may be able to discover what their optimum life conditions and habitat are. I do not despair of discovering how they reproduce themselves.

I have the feeling that there is something they want very much to tell me.

MAY 13th. Six prott today. According to my photographic record, only one of them was of the opaque solid-nucleus kind. The others all showed the luminous light-tracked mesh.

The communication was difficult. It is exhausting to me physically. I had again that sense of psychic pressure, of urgency, in their sendings. If I only knew what they wanted to "talk" about, it would be so much easier for me.

I have the impression that they have a psychic itch they want me to help them scratch. That's silly? Yes, I know, yet that is the odd impression I have.

After they were gone, I analyzed my photographs carefully. The knotted light meshes are not identical in individuals. If the patterns are constant for individuals, it would seem that two of

the light-mesh kind have been here before.

What do they want to talk about?

May 14th. Today the prott—seven of them—and I communicated about habitat. This much is fairly certain. It would appear—and I think that from now on any statement I make about them is going to have to be heavily qualified—it would appear that they are not necessarily confined to the lightless, heatless depths of space. I can't be sure about this. But I thought I got the hint of something "solid" in their thinking.

Wild speculation: do they get their energy from stars?

Behind their sendings, I got again the hint of some other more desired communication. Something which at once attracts and—repels? frightens? embarrasses?

Sometimes the humor of my situation comes to me suddenly. An embarrassed prott! But I suppose there's no reason why not.

All my visitors today were of the knotted network kind.

May 16th. No prott yesterday or today.

May 18th. At last! Three prott! From subsequent analysis of the network patterns, all had been here to interview me before. We

began communication about habitat and what, with protoplasm, would be metabolic processes, but they did not seem interested. They left soon.

Why do they visit the ship, anyhow? Curiosity? That motive must not be so powerful by now. Because of something they want from me? I imagine so; it is again an awareness of some psychic itch. And that gives me a lead as to the course I should follow.

The next time they appear, I shall try to be more passive in my communications. I shall try not to lead them on to any particular subject. Not only is this good interviewing technique, it is essential in this case if I am to gain their full cooperation.

MAY 20. After a fruitless wait yesterday, today there was one lone prott. In accordance with my recent decision, I adopted a highly passive attitude toward it. I sent out signals of willingness and receptivity, and I waited, watching the prott.

For five or ten minutes there was "silence." The prott moved about in the viewers with an effect of restlessness, though it might have been any other emotion, of course. Suddenly, with great haste and urgency, it began to send. I had again that image of the cork blowing out of the champagne bottle.

ITS sending was remarkably difficult for me to follow. At the end of the first three minutes or so, I was wringing wet with sweat. Its communications were repetitive, urgent, and, I believe, pleasurable. I simply had no terms into which to translate them. They seemed to involve many verbs.

I "listened" passively, trying to preserve my mental equilibrium. My bewilderment increased as the prott continued to send. Finally I had to recognize that I was getting to a point where intellectual frustration would interfere with my telepathy. I ventured to put a question, a simple "Please classify" to the prott.

Its sending slackened and then ceased abruptly. It disappeared.

What did I learn from the interview? That the passive approach is the correct one, and that a prott will send freely (and most confusingly, as far as I am concerned) if it is not harassed with questions or directed to a particular topic. What I didn't learn was what the prott was sending about.

Whatever it was, I have the impression that it was highly agreeable to the prott.

Later—I have been rereading the notes I made on my sessions with the prott. What has been the

matter with me? I wonder at my blindness. For the topic about which the prott was sending—the pleasurable, repetitive, embarrassing topic, the one about which it could not bear to be questioned, the subject which involved so many verbs—that topic could be nothing other than its sex life.

When put this baldly, it sounds ridiculous. I make haste to qualify it. We don't, as yet—and what a triumph it is to be able to say "as yet"—know anything about the manner in which prott reproduce themselves. They may, for example, increase by a sort of fission. They may be dioecious, as so much highly organized life is. Or their reproductive cycle may involve the cooperative activity of two, three or even more different sorts of prott.

So far, I have seen only the two sorts, those with the solid nucleus, and those with the intricate network of light. That does not mean there may not be other kinds.

But what I am driving at is this: The topic about which the prott communicated with me today is one which, to the prott, has the same emotional and psychic value that sex has to protoplasmic life.

(Somehow, at this point, I am reminded of a little anecdote of my grandmother's. She used to say that there are four things in

a dog's life which it is important for it to keep in mind, one for each foot. The things are food, food, sex, and *food*. She bred dachshunds and she knew. Question: does my coming up with this recollection at this time mean that I suspect the prott's copulatory activity is also nutritive, like the way in which ameba conjugate? Their exchange of nuclei seems to have a beneficial effect on their metabolism.)

Be that as it may, I now have a thesis to test in my dealings with the prott!

May 21. There were seven prott in the viewer when the signal rang. While I watched, more and more arrived. It was impossible to count them accurately, but I think there must have been at least fifteen.

They started communicating almost immediately. Not wanting to disturb them with directives, I attempted to "listen" passively, but the effect on me was that of being caught in a crowd of people all talking at once. After a few minutes, I was compelled to ask them to send one at a time.

From then on, the sending was entirely orderly.

Orderly, but incomprehensible. So much so that, at the end of some two hours, I was forced to break off the interview.

It is the first time I have ever

done such a thing.

Why did I do it? My motives are not entirely clear even to myself. I was trying to receive passively, keeping in mind the theory I had formed about the prott's communication. (And let me say at this point that I have found nothing to contradict it. Nothing whatever.) Yet, as time passed, my bewilderment increased almost painfully. Out of the mass of chaotic, repetitive material presented to me, I was able to form *not one single clear idea*.

I would not have believed that a merely intellectual frustration could be so difficult to take.

The communication itself was less difficult than yesterday. I must think.

I have begun to lose weight.

JUNE 12th. I have not made an **J** entry in my diary for a long time. In the interval, I have had thirty-six interviews with prott.

What emerges from these sessions, which are so painful and frustrating to me, so highly enjoyed by the prott?

First, communication with them has become very much easier. It has become, in fact, too easy. I continually find their thoughts intruding on me at times when I cannot welcome them—when I am eating, writing up my

notes, or trying to sleep. But the strain of communication is much less and I suppose that does constitute an advance.

Second, out of the welter of material presented to me, I have at last succeeded in forming one fairly clear idea. That is that the main topic of the prott's communication is a process that could be represented verbally as —ing the—. I add at once that the blanks do not necessarily represent an obscenity. I have, in fact, no idea what they *do* represent.

(The phrases that come into my mind in this connection are "kicking the bucket" and "belling the cat." It may not be without significance that one of these phrases relates to death and the other to danger. Communication with prott is so unsatisfactory that one cannot afford to neglect any intimations that might clarify it. It is possible that —ing the — is something which is potentially dangerous to prott, but that's only a guess. I could have it all wrong, and I probably do.)

At any rate, my future course has become clear. From now on I will attempt, by every mental means at my disposal, to get the prott to specify what —ing the — is. There is no longer any fear of losing their cooperation. Even as I dictate these words to the playback, they are sending more material about —ing the — to me.

JUNE 30. The time has gone very quickly, and yet each individual moment has dragged. I have had fifty-two formal interviews with prott—they appear in crowds ranging from fifteen to forty or so—and countless informal ones. My photographic record shows that more than ninety per cent of those that have appeared have been of the luminous network kind.

In all this communication, what have I learned? It gives me a sort of bitter satisfaction to say: "Nothing at all."

I am too chagrined to go on.

July 1. I don't mean that I haven't explored avenue after avenue. For instance, at one time it appeared that —ing the — had something to do with the intersections of the luminous network in prott of that sort. When I attempted to pursue this idea, I met with a negative that seemed amused as well as indignant. They indicated that —ing the — was concerned with the whitish body surfaces, but when I picked up the theme, I got another negative signal. And so on. I must have attacked the problem from fifty different angles, but I had to give up on all of them.

—ing the —, it would appear, is electrical, non-electrical, solitary, dual, triple, communal, con-



stant, never done at all. At one time I thought that it might apply to any pleasurable activity, but the prott signaled that I was all wrong. I broke that session off short.

Outside of their baffling communications on the subject of —ing the —, I have learned almost nothing from the prott.

(How sick I am of them and their inane, vacuous babbling! The phrases of our communication ring in my mind for hours afterward. They haunt me like a clinging odor or stubbornly lingering taste.)

During one session, a prott (solid nucleus, I think, but I am not sure) informed me that they could live under a wide variety of conditions, provided there was a source of radiant energy not too remote. Besides that scrap of information, I have an impression that they are grateful to me for listening to them. Their feelings, I think, could be expressed in the words "understanding and sympathetic."

I don't know why they think so, I'm sure. I would rather communicate with a swarm of dogfish, which are primitively telepathic, than listen to any more prott.

I have had to punch another hole in my wristwatch strap to take up the slack. This makes the third one.

July 3rd. It is difficult for me to use the playback, the prott are sending so hard. I have scarcely a moment's rest from their communications, all concerned with the same damned subject. But I have come to a resolve: I am going home.

Yes, home. It may be that I have failed in my project, because of inner weaknesses. It may be that no man alive could have accomplished more. I don't know. But I ache to get away from them and the flabby texture of their babbling minds. If only there were some way of shutting them off, of stopping my mental ears against them temporarily, I think I could stand it. But there isn't.

I'm going home. I've started putting course data in the computers.

JULY 4th. They say they are going back with me. It seems they like me so much, they don't want to be without me.

I will have to decide.

July 12th. It is dreadfully hard to think, for they are sending like mad.

I am not so altruistic, so unselfish, that I would condemn myself to a lifetime of listening to prott if I could get out of it. But suppose I ignore the warnings of instinct, the dictates of con-

science, and return to Earth, anyhow—what will be the result?

The prott will go with me. I will not be rid of them. And I will have loosed a wave of prott on Earth.

They want passionately to send about —ing the —. They have discovered that Earthmen are potential receptors. I have myself to blame for that. If I show them the way to Earth . . .

The dilemma is inherently comic, I suppose. It is none the less real. Oh, it is possible that there is some way of destroying prott, and that the resources of Earth intelligence might discover it. Or, failing that, we might be able to work out a way of living with them. But the danger is too great; I dare not ask my planet to face it. I will stay here.

The *Ellis* is a strong, comfortable ship. According to my calculations, there is enough air, water and food to last me the rest of my natural life. Power—since I am not going back—I have in abundance. I ought to get along all right.

Except for the prott. When I think of them, my heart contracts with despair and revulsion. And yet—a scientist must be honest—it is not all despair. I feel a little sorry for them, a little flattered at their need for me. And I am not, even now, altogether hopeless. Perhaps some day—some day—I

shall understand the prott.

I am going to put this diary in a permaloy cylinder and jet it away from the ship with a signal rocket. I can soup up the rocket's charge with power from the fuel tanks. I have tried it on the calculators, and I think the rocket can make it to the edge of the gravitational field of the Solar System.

Good-by, Earth. I am doing it for you. Remember me.

FOX put the last page of the manuscript down. "The poor bastard," he said.

"Yeah, the poor bastard. Sitting out there in deep space, year after year, listening to those things bellyaching, and thinking what a savior he was."

"I can't say I feel much sympathy for him, really. I suppose they followed the signal rocket back."

"Yeah. And then they increased. Oh, he fixed it, all right."

There was a depressed silence. Then Fox said, "I'd better go. Impatient."

"Mine, too."

They said good-by to each other on the curb. Fox stood waiting, still not quite hopeless. But after a moment the hateful voice within his head began:

"I want to tell you more about —ing the —"

—MARGARET ST. CLAIR

(Continued from page 3)
eyed—notions survive.

If you believe that close-set eyes and lobeless ears constitute the criminal type, you can thank Lombroso for selling you a pseudo-scientific pup. Its vogue is over, thank God, but for a while he almost proved it—social rejection drove many citizens into crime because they were afflicted with these characteristics!

The insane conviction that genius is insanity forges right on, however. Maladjustment may push a gifted person into some endeavor in which he displays genius, but an emotionally crippled genius is only part of a genius. Cure his illness, liberate him, and he must function more ably. But geniuses and non-geniuses took Lombroso literally, and still do, for that matter.

War is an integral part of mankind; it is ineradicable.

As I've stated before, we'd be in a worse mess than now if we hadn't fought our just wars. Nevertheless, war is inflicted on humanity, not sought because, as the Nazis remorselessly insisted, it's the highest goal of civilization. Even after the most intensive indoctrination any modern nation has received, Germany was in a state of panic in 1939 that was resolved by the reality of war.

I disagree with William James that a "moral equivalent" for

war must be found before we can have permanent peace. It's a political and economic expedient, not a psychic need. When those expedients are no longer necessary, war will vanish and nothing need take its place.

Human nature cannot change.

Definition, please! "Human nature" is a term without meaning; it lumps all groups in one inchoate mass, disregarding cultural goals, religions, economic setup, level of civilization, everything that distinguishes one branch of humanity from another.

This gaseous quality called human nature may not change, but people do — individuals as well as groups. We've left slavery and feudalism behind; we inhabit this planet from pole to equator; we're idolator and monotheist; carnivore, herbivore and omnivore; pacifist and militarist; selfish and idealistic.

Man, in other words, is infinitely adaptable. He'll go to the stars and he'll change to meet their requirements. He will also stay on Earth and learn to live in a Galactic Federation.

The Earth is flat; the stars are lamps; the Sun circles the Earth —all were once common sense. How many of our "common sense" concepts are also pure nonsense?

—H. L. GOLD

5

GALAXY'S STAR

SHELF

THE QUEST FOR UTOPIA,
edited by Glenn Negley and J.
Max Patrick. Henry Schuman,
New York, 1952. 608 pages, \$6.75

THIS is the definitive book on utopias for the science fiction lover's collection. It is genuinely scholarly without being in the least degree dull, authoritative without being pretentious. And it is crammed full of perfectly wonderful stuff.

Practically all of the utopias included are much abbreviated; but this in itself is a merit. Utopians in general are wearisomely wordy, and Negley and Patrick have done a highly crea-

tive job of excerpting. In addition, they have modernized and sometimes "translated" the antique language of the older examples in such fashion as to retain their old-world charm while giving them greater clarity.

Utopias available in modern editions are not included, in order to keep the book within reasonable size limits. However, these works are given thorough critical evaluation in the editors' informative and pleasantly written biographical-historical notes.

Oddly, the modern utopians, from Ignatius Donnelly, whose truly science fiction *Caesar's Column* (1892) is effectively ex-

cerpted, to Conde Pallen's violently reactionary *Crucible Island*, in 1919, come first. Then the classicists, from Thomas More to Etienne Cabet, with his dull, idealistic *Voyage to Icaria*, come next. Finally, there is a return to contemporary utopian thought, with a 10-page summary of current stuff up to and including Orwell, C. S. Lewis, and B. F. Skinner, whose *Walden Two* (1948) is given quite a going-over by the editors.

In all, a valuable job. The modern reader cannot fully appreciate good contemporary science fiction stories unless he has some knowledge of the historical trend of utopian thought and of the highlights of utopian writing. This book will give him that knowledge, and very pleasantly, too.

FOUNDATION AND EMPIRE
by Isaac Asimov. Gnome Press, New York, 1952. 247 pages, \$2.75

HERE is the second book of what eventually will be a three-volume history of the First and Second Foundations, and of the Galactic Empire which these odd organizations of psycho-historian Hari Seldon, these oases of science in the midst of a desert of galactic worlds returning to barbarism, strove to bring back to a new culture. The first vol-

ume, *Foundation*, was reviewed in the February 1952 GALAXY.

Volume Two takes Asimov's remarkable epic through the end of the first part of the story about "The Mule," that fantastic mutant who nearly overthrew the whole Seldon plan.

For those who remember the series from its original appearance in *Astounding Science Fiction*, it can be said that it stands up magnificently. And for readers who are new to it, it can be reported that this fine swash-buckling galactic adventure is based (unlike most such items) on some extremely hard-headed, scientific and mature social-political thinking. Asimov takes his galactic civilizations up (and down) much the same culture steps that our own Earth society has trod, and this gives his imaginative romance a very solid, social-scientific air.

TIMELESS STORIES, edited By Ray Bradbury. Bantam Books, New York, 1952. 320 pages, 35¢

IF there is anyone around who thinks creative writing is in the doldrums in America, he should have a look at this collection of 26 tales of the imagination, edited by one who really knows good fantasy when he sees it. Roughly half a dozen tales

are by Europeans; the rest are by Americans and good!

It is a strictly contemporary collection, too. Outside of Kafka's weird and overlong "In the Penal Colony" and "Inflexible Logic," that wonderful straight-faced farce by the lamented Russell Maloney, the stories are, I think, all by authors still living. Eighteen bear copyright dates later than 1940.

It would be pointless to list the whole table of contents here. Every selection is distinguished, though two or three seem a bit tenuous.

Particularly outstanding are John Steinbeck's ribald "Saint Katy the Virgin," Ludwig Bemelmans' gruesomely charming "Putzi," Henry Kuttner's lovely "Housing Problem," J. C. Furnas' "The Laocoön Complex," which is particularly good considering the nature of the author's usual matter-of-fact writing, and Hortense Calisher's completely terrifying "Heartburn."

The only author *not* included, whom one automatically would expect to find in such a collection, is John Collier. Ray himself is represented by "The Pedestrian," which was elaborated from a passage in his novella, "The Fireman," published in the February 1951 *GALAXY*.

An enchanting collection—and, at 35¢, 1952's Best Buy!

AWAY AND BEYOND by A. E. van Vogt. *Pellegrini & Cudahy*, New York, 1952. 309 pages, \$3.50

COMES now a new helping of that very high-spiced, faintly spoiled caviar that is van Vogt's science fiction: nine stories of the Impossible clutching the Rational by the throat and astonishing it to death. Very nice, too.

Curiously, the best story in the book seems to be the one bearing most closely on reality: that memorable tale, "Secret Unattainable," in which a highly circumstantial story of the invention—and destruction—of a matter transmitter in Nazi Germany is told through the medium of memos, telegrams, interviews, letters, etc., from and to notables like Himmler, Heydrich, Hitler and also such fictional characters as Professor Kenrube, the inventor of the process. It is a remarkably real story that will stay with you for a long time.

Other tales include "The Vault of the Beast," a fruity epic of Evil Beings on Mars who create the weirdest robot yet to conquer Man; "Heir Unapparent," about a bad dictator trying to take over from a good one; "Second Solution," a rather fascinating incident in the van Vogt epic of the Rulls, the Ezwals, and Professor Jamieson; and "Asy-

lum," second-best story in the book from my point of view, which tells of the first contact of the Galactic civilization with Earth through the malign intervention of a pair of vampiric Dreeghs.

In general, a book for van Vogt completists, as well as for lovers of gee-whizz writing, such as myself.

THE BEST SCIENCE FICTION STORIES, 1952. Edited by Everett F. Bleiler and T. E. Dikty. *Frederick Fell, Inc., New York, 1952.* 288 pages, \$2.95

THE fourth in this series of annuals contains 18 stories from the 1951 magazines. I class 13 as A or better, 2 as B, and 3 as C or less. A truly excellent average.

The dullest and most pretentious part of the book is the introduction, a heavy-handed literary survey of the literature of protest, only slightly connected to the science fiction in the book.

For readers who loved Peter Phillips' "Unknown Quantity," from the British *New Worlds*, it should be pointed out that his "At No Extra Cost" in this volume is the same tale.

Other outstanding jobs include Leiber's "Appointment in Tomorrow," (previously antholo-

gized under the title "Poor Superman!" in Heinlein's *Tomorrow the Stars*), Kornbluth's "The Marching Morons," Bester's "Of Time and Third Avenue," Boucher's "Nine-Finger Jack," and Reynolds' and Brown's "Dark Interlude," (also anthologized in the **GALAXY Reader of Science Fiction** late last year).

AN unusual item that **GALAXY** readers might like to know about deserves mention here. This is Donald B. Day's superb *Index to the Science Fiction Magazines* (Perri Press, Portland, Ore., \$6.50). This big book contains a complete listing of the contents of all the science fiction magazines by authors' and artists' names and by story titles. The book has already saved me hours of work and a goodly number of errors—for which I can only hope for Mr. Day the reward of a truly appreciative market which will at least to some degree repay him for his efforts.

May we hope also that the compiler is planning to issue biennial supplements? The years 1951-1952 have been very fruitful of good—and bad—science fiction. The need for an index for these years is even greater than for earlier decades.

—GROFF CONKLIN

Ring Around

By CLIFFORD D. SIMAK

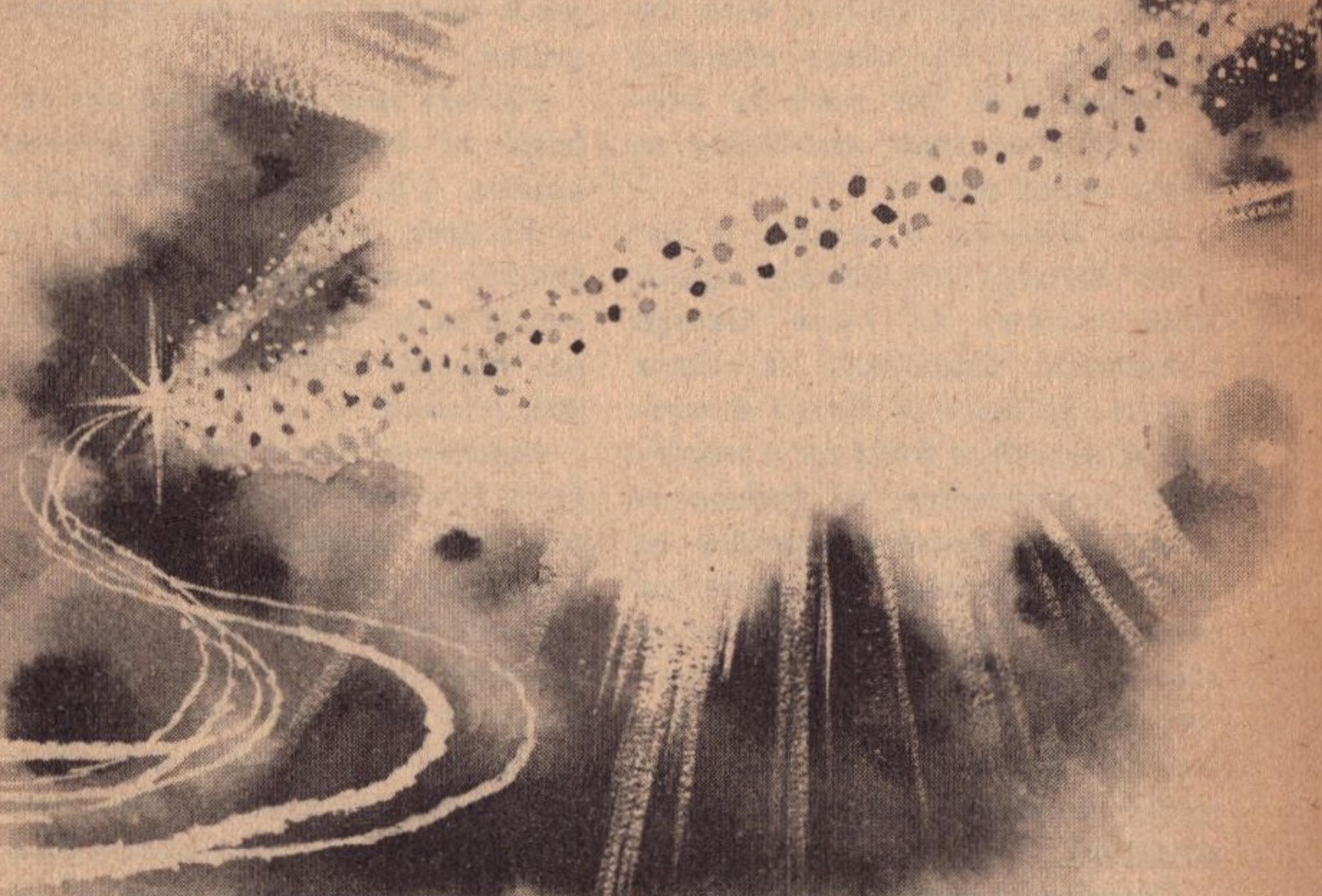
Hunted down for his strangeness, Vickers found himself hemmed in with no escape. But there was a way out—into the unknown!

Illustrated by DON SIBLEY



The Sun

Part 2 of 3-Part Serial



SYNOPSIS

WORLD industry is backed against the wall, fighting an enemy which it cannot identify. The razor blade industry has been wiped out by an everlasting blade—buy one and never have to buy another. A cigarette lighter, never needing new flints, never needing fluid, has destroyed

the lighter industry. The light bulb manufacturers are out of business because of an everlasting bulb. The auto industry is threatened by a new car, guaranteed to run forever. Housing interests are faced with extinction by the introduction of new houses which are manufactured to sell at \$500 a room.

As if all this were not bad

enough, the cold war, in this year of 1977, still is going on, complete with incident and insult, but never quite breaking out into shooting war.

The Pretentionists are a sign of this tension—a club movement, spreading rapidly, with the members of the clubs effecting a retreat into the past by pretending that they are living in some other era.

Jay Vickers, a writer, is invited through his literary agent, Ann Carter, to meet George Crawford. Crawford, it turns out, is the head of North American Research, a front for a worldwide organization of industries which have banded together to fight the invisible company or companies which are producing the "everlasting" items. Crawford is convinced that the "everlasting" companies want to destroy the entire global economic structure.

Crawford wants Vickers to write a book exposing this threat, but Vickers refuses. Because of his refusal, he and Ann quarrel. Each of them, without realizing it (and if realizing, not admitting it) are in love with the other. Ann is angry because he could have named his price, but he insists he has a book to finish.

Vickers still remembers a girl named Kathleen Preston, with whom he was in love some 20

years before. He has managed to thrust this memory far back in his mind, but when the moppet next door asks him why he isn't married, it all comes back to him and he recalls the day that he and Kathleen had walked in what seemed to be an enchanted valley.

Vickers and Ann visit an exhibit of the new \$500-a-room houses. The deal is astonishing—Vickers, for instance, has a \$20,000 home which the company would accept as a trade-in—and pay him the difference, over \$15,000, in cash!

Returning home alone, Vickers finds Horton Flanders, an eccentric old neighbor, waiting to spend the evening with him. In the course of their talk, Flanders declares that he believes there is some intervening force which keeps the world from war, that this same force some 80 years before had given the world a kick in the pants, booting it out of its rut and sending it at a gallop along a new road of scientific and technological achievement.

Under Vickers' questioning, Flanders hints at some reason to believe there must be reservoirs of knowledge in the stars and expresses a belief that Man can reach out mentally and tap those reservoirs.

After Flanders goes home, Vickers hears a mouse. There

shouldn't be any mice, since the exterminator had been there that day. He sees the mouse in a corner and hurls a paperweight at it. It comes apart, no mouse, but some contraption which Vickers believes may be a spying device.

Vickers starts out in the middle of the night to try to get out of Flanders the truth of the hints which he had dropped, only to find that Flanders has disappeared and is being hunted by a village posse.

The next day Vickers gets a letter from Flanders apologizing for causing him inconvenience by disappearing, but explaining that it was necessary that he do so. He recommends that Vickers revisit the scenes of his childhood "so you may see with clearer eyes."

Frantically seeking a key to the mystery which appears to be centering about him, Vickers finds in his attic a book of notes, written many years before, which indicates that he is somehow different than the normal run of humans.

A friend of his, Eb, the garage-man, comes to warn him that he is suspected of doing away with Flanders and that a lynch mob is forming. Eb tells him he must get away and has brought along a new *Forever* car in which he can make his escape.

Vickers flees to his childhood

country. Revisiting his old home, now standing vacant, he finds a battered top which he had lost when a boy of eight.

He remembers an incident entirely forgotten until now, that the top once had taken him, as a child, into *fairyland*. Years later, he and Kathleen Preston had wandered into that same enchanted valley—from which he had brought home a flower in winter.

He tries to buy another top to try the trip again, but tops have gone out of style and there are none for sale. So he repairs the ancient one and repaints it, feeling that perhaps it will serve the purpose.

Running out of money, he calls Ann Carter to have her telegraph him funds. She tells him that Crawford is searching frantically for him.

Later that night Crawford, who has had Ann's phone tapped in an effort to locate Vickers, shows up at Vickers' hotel room. He tells Vickers that the people industry is fighting are a group of mutants who are systematically going about the reduction of Earth's economic system as the first step in building a world in which the mutant will be the *Cro-Magnon* to the normal man's *Neanderthal*. He says that Vickers is an unsuspecting mutant, pleads with him to work together

in reaching an understanding between the mutants and the normal humans to avert war. He hints that Ann Carter also is a mutant, likewise not aware of her mutancy.

Crawford says the normal humans have a secret weapon which they will not hesitate to use to smash the mutants. All of this baffles Vickers and makes him feel helpless, for he has not been in contact with any mutants and certainly not with their organization. And he is afraid of Crawford, who is even more afraid of Vickers—which makes him all the more dangerous.

XXIV

WHEN he could hear Crawford's footfalls no longer, Vickers went to the telephone and lifted it and gave a number, then waited for the connection to be made.

He'd have to tell Ann fast. He couldn't waste much time, for Crawford's wire tappers would be listening. She must be out and gone before they could reach her door.

He'd say: "Will you do something for me, Ann? Will you do it without question, without asking why?"

He'd say: "You remember that place where you asked about the stove? I'll meet you there."

Then he'd say: "Get out of your apartment. Get out and hide. Stay out of sight. Right this minute. Not an hour from now. Not five minutes. Not a minute. Hang up this phone and go."

It would have to be fast. It would have to be sure. It would have to be blind.

He couldn't say, "Ann, you're a mutant," then have her want to know what a mutant was and how he came to know and what it meant, while all the time the listeners would be moving toward her door.

She had to go on faith. But would she?

Thinking of how she might want to argue, how she might not want to go without a reason for her going, he felt the moisture trickle out of his armpits and run down his ribs.

The phone was ringing now. He tried to recall what her apartment looked like, how the phone sat on the table at the end of the davenport, and how she would be coming across the room to lift the receiver, and in a moment he would hear her voice.

The operator said, "That number doesn't answer, sir."

"Try this one, then," he said, giving the operator the number of her office.

He waited again and heard the ringing.

"That number doesn't answer, sir," the operator finally said.

"Thank you," said Vickers.

"Shall I try again?"

"No," said Vickers. "Cancel the call, please."

He had to think and plan. He had to try to figure out what it was all about. Before this, it had been easy to seek refuge in the belief that it was imagination, that he and the world were half insane, that everything would be all right if he'd just ignore whatever might be going on.

He couldn't believe it any longer.

For now he must accept at face value the story that Crawford had told, sitting in this room, with his massive bulk bulging in the chair, with his face unchanging and his voice a flat monotone that pronounced threats, but gave them no inflection and also no life.

He must believe in human mutation and in a world divided and embattled. He must believe even in the fairyland of childhood, for if he actually was a mutant, then fairyland somehow was a mark of it.

HE tried to tie together the implications of Crawford's story, tried to understand what it all might mean, but there were too many ramifications, too many random factors, too much

he did not know.

There was a world of mutants, men and women who were more than normal, persons who had certain human talents and certain human understandings which the normal men and women of the world had never known or, having known, could not utilize in their entirety, unable to use intelligently all the mighty powers which lay dormant in their brains.

This was the next step up. This was evolution. This was how the human race advanced.

"And God knows," said Vickers to the empty room, "it needs advancement now if it ever did."

A band of mutants, working together, but working undercover since the normal world would turn on them with fang and claw for their very differentness if they revealed themselves.

And what was this differentness? What could they hope to do with it?

A few of the things he knew—Forever cars and everlasting razor blades and the light bulbs that did not burn out and synthetic carbohydrates that fed the hungry and helped to hold war at arm's length from the throat of humanity.

But what else? Surely there was more than that.

Intervention, Horton Flanders had said, rocking on the porch.

Some sort of intervention that had helped the world advance and then had staved off, somehow or other, the bitter, terrible fruits of progress wrongly used.

Horton Flanders was the man who could tell him, Vickers knew. But where was Horton Flanders now?

"They're hard to catch," Crawford had said. "You ring doorbells and wait. You send in your name and wait. You track them down and wait. And they're never where you think they are, but somewhere else."

First, thought Vickers, plotting out his moves, I've got to get out of here and be hard to catch myself.

Second, find Ann and see that she is hidden out.

Third, find Horton Flanders and, if he doesn't want to talk, choke it out of him.

He picked up the top and went downstairs and turned in his key. The clerk got out his bill.

"I have a message for you," said the clerk, reaching back into the pigeonhole that held the key. "The gentleman who was up to see you a while ago gave it to me before he left."

He handed across an envelope and Vickers ripped it open, pulled out a folded sheet.

"A funny kind of business," said the clerk. "He'd just been talking to you."

"Yes," said Vickers, "it is a funny kind of business."

The note read: *Don't try to use that car of yours. If anything happens, keep your mouth shut.*

It was a very funny kind of business.

XXV

VICKERS drove toward the dawn. The road was deserted and the car ran like a fleeing thing, with no sound but the whistle of the tires as they hugged the pavement on the curves. Beside him, on the seat, the gaily painted top rolled back and forth to the motion of the car.

There were two things wrong, two immediate things:

He should have stopped at the Preston house.

He should not have used the car.

Both, of course, were foolish, and he berated himself for thinking of them. He pushed the accelerator down so that the whistle of the tires became a high, shrill scream as they took the curves.

He should have stopped at the Preston house and tried out the top. That, he told himself, was what he had planned to do, and he searched in his mind for the reasons that had made him plan it that way, but there were no reasons. If the top worked, it

would work anywhere and that was all there could be to it. It wouldn't matter where it worked, although deep inside him was a feeling that it did matter to him, at least, where it worked. There was something special about the Preston house. It was a key point—it must be a key point in this mystery of mutants.

I couldn't take the time, he argued with himself. The first job is to get back to New York and find Ann and get her out of sight.

For Ann, he told himself, must be the other mutant, although once again, as with the Preston house, he could not be entirely sure. There was no reason, no substantial proof, that Ann Carter was a mutant.

Reason; he thought. Reason and proof. And what are they? No more than the orderly logic on which Man has built his world. Could there be inside a man another sense, another yard-stick by which one could live, setting aside the matter of reason and of proof as childish things which once had been good enough, though clumsy at the best? Could there be a way of knowing right from wrong, good from bad, without the endless reasoning and the dull parade of proof? Intuition? That was female nonsense. Premonition? That was superstition.

And yet were they really female nonsense and superstition? For years researchers had concerned themselves with extra-sensory perception, a sixth sense that Man might hold within himself, but had been unable to develop to its full capacity.

And if extra-sensory perception were possible, then many other abilities were possible as well—the psycho-kinetic control of objects through the power of mind alone, the ability to look into the future, the recognition of time as something other than the movement of the hands upon a clock, the ability to know and manipulate unsuspected dimensional extensions of the space-time continuum.

FIVE senses, Vickers thought—the sense of smell, of sight, of hearing, of taste and touch. Those were the five that Man had known since time immemorial, but did it mean that was all he had? Were there other senses waiting in his mind for development, as the opposable thumb, the erect posture and logical thinking had been developed throughout the millenia of Man's existence? He had evolved from a tree-dwelling, fear-shivering thing into a club-carrying animal, into a fire-making animal. He had made, first of all, the simplest of tools, then more complex

tools, and finally tools so complex that they were machines.

All of this had been done as the result of developing intelligence. Was it not possible that the development of intelligence, the development of the human senses, was not finished yet? And if this were true, why not a sixth sense, or a seventh, or an eighth, or any number of additional senses, which would come under the general heading of the natural evolution of the human race?

Was that, Vickers wondered, what had happened to the mutants, the sudden development of these additional and only half-suspected senses? Was not the mutation logical in itself—the thing that one might well expect?

He swirled through little villages still sleeping between the night and dawn and went past farm houses lying strangely naked in the half light that ran on the eastern skyline.

Don't try to use the car, Crawford's note had read. And that was foolish, too, for there was no reason why he should not use the car. No reason other than Crawford's saying so. And who was Crawford? An enemy? Perhaps, although at times he didn't act like one. A man who was afraid of the defeat that he felt sure would come, more fearful, seemingly, of the commission of

defeat than of defeat itself.

Reason once again.

No reason why he should not use the car. But he was faintly uneasy, using it.

No reason why he should have stopped at the Preston house and still, in his heart, he felt he had somehow failed by not stopping there.

No reason to believe Ann Carter was a mutant, and yet he was sure she was.

He drove through the morning, with the fog rising from all the little streams he crossed, with the flush of sun against the eastern sky, with, finally, boys and dogs going after cows, and the first traffic on the road.

He suddenly realized that he was hungry and a little sleepy, but he couldn't stop to sleep. He had to keep on going. When it became dangerous to drive, he would have to sleep, but not until then, and then not for long.

But he'd have to stop somewhere to eat. At the next town he came to, if it had an eating place that was open, he would stop and eat. Perhaps a cup or two of coffee would chase away the sleep.

XXVI

THE town was large and there were eating places and people on the street, the six o'clock fac-

tory workers on the way to their seven o'clock jobs.

He picked out a restaurant that didn't look too bad, that had less of the cockroach look about it than some of the others, and slowed to a crawl, looking for a parking place. He found one a block away.

He parked and got out, locked the door. Standing on the sidewalk, he sniffed the morning. It still was fresh, with the deceptive coolness of a summer morning.

He'd have breakfast, he told himself, take his time eating it, give himself a chance to relax, to let some of the road fatigue drop from his bones.

MAYBE he'd ought to call Ann again. This morning he might catch her in. He'd feel safer if she knew and if she were in hiding. Perhaps instead of just meeting him at the place where they sold the houses, she should go there and explain to them what the situation was and they might help her. But to explain that to Ann would take too long. He had to tell her fast and she had to go on faith.

He went back down the street and turned in at the restaurant door. There were tables, but no one seemed to be using them. All the eaters were bellied up to the counter. There were a few stools still left and Vickers took one.

On the left side of him, a husky workman in faded shirt and bulging overalls was noisily slurping up a bowl of oatmeal, head bent close above the bowl, shoveling the cereal into his mouth with a rapidly moving spoon that dipped and lifted, dipped and lifted, almost as if the man were attempting to establish a siphoning flow of the food into his mouth. On the other side sat a man in blue slacks and white shirt with a neat black bow. He wore glasses and he read a paper and he was, from the look of him, a bookkeeper or something of the sort, a man handy with a column of figures and very smug about it.

A waitress came and mopped the counter in front of Vickers with a wet cloth.

"What'll you have?" she asked impersonally, running the question together into a single word.

"Stack of cakes," said Vickers, "with a side of ham."

"Coffee?"

"Coffee."

The breakfast came and he ate it, hurriedly at first, stuffing his mouth with great forkfuls of syrup-dripping cakes, with generous cuts of ham, then more slowly as the bite of hunger was appeased.

The overalled man got up and left. A girl with drooping eyelids took his place. Some weary sec-

retary, Vickers thought, with only an hour or two of sleep after a night out.

He was almost through eating when he heard the shouting in the street outside, then the sound of running feet.

The girl beside him swung around on her stool and looked out the window.

"Everybody's running," she said. "I wonder what's the trouble."

A man stopped outside the door and yelled, "They found one of them **Forever cars!**"

EVERYBODY leaped from the stools and surged toward the door. Vickers followed slowly.

They'd found a **Forever car**, the shouting man had said. The only one they could have found was the one Vickers had parked just up the street.

They had tipped the car over and rolled it out into the middle of the road. They were ringed around it, shouting and shaking their fists. Someone threw a brick or stone at it and the sound of the object striking its metal boomed through the early morning street like a cannon shot.

Someone picked up whatever had been thrown and heaved it through the door of a hardware store. Reaching in through the broken glass, someone else unlocked the door. Men streamed

in and came out again, carrying mauls and axes.

The crowd drew back to give them elbow room. The mauls and axes flashed in the slanted sunlight. They struck and struck again. Glass shattered with a crunching sound, then came the metallic clanging and denting.

Vickers stood beside the restaurant door, sick in the pit of his stomach, his brain frozen with what later might be fear, but which now was no more than astonishment and blind befuddlement.

Crawford had written: *Don't try to use that cars of yours.*

This was what he'd meant.

Crawford had known what would happen to any **Forever car** found parked upon the street.

Crawford had known and tried to warn him.

Friend or foe?

Vickers reached out a hand and put it, palm flat, against the rough brick of the building.

The touch of the brick, the roughness of it, told him that this was happening, that it was no dream, that he actually stood here, in front of a restaurant in which he had just eaten breakfast, and saw a mob, mad with hate, smashing up his car.

The people finally know. They've been told about the mutants.

And they hate the mutants.

Of course they hate them, because the existence of the mutants makes them second-class humans, because they are Neanderthalers suddenly invaded by a bow and arrow people.

He turned and went back into the restaurant, ready to leap and run if someone should suddenly shout behind him, if a finger tapped his shoulder.

The bespectacled man with the black bow tie had left the paper beside his plate. Vickers picked it up, walked steadily on, down the length of counter. He pushed open the swinging door that led into the kitchen. There was no one there. He walked through the kitchen rapidly, let himself out the rear door into an alley.

He went down the alley, found another narrow one between two buildings, leading to an opposite street. He took it, crossed the street when he came to it, followed another alleyway between two buildings that led to another alley.

"They'll fight," Crawford had said, sitting in the hotel room the night before, his big body filling the chair to overflowing. "They'll fight with what they have."

So now they were fighting, striking with what they had. They had picked up their club and were fighting back.

He found a park and walking

through it, came across a bench shielded from the street by a clump of bushes. He sat down and unfolded the paper he had taken from the restaurant, turned its pages back until he found the front page.

And there the story was.

XXVII

THE headline said: WE ARE BEING TAKEN OVER!

The drop read: PLOT BY SUPER MEN REVEALED.

And the deck: Superhuman Race Among Us; Mystery of Everlasting Razor Blades Solved.

And the story:

WASHINGTON (Special) — The greatest danger the human race has faced in all the years of its existence—a danger which may reduce all of us to slavery—was revealed today in a joint announcement by the Federal Bureau of Investigation, the military chiefs of staff and the Washington office of the International Bureau of Economics.

The joint announcement was made at a news conference called by President Humphrey.

Simultaneous announcements were made in all the other major capitals of the world—London, Moscow, Paris, Madrid, Rome, Cairo, Peking and a dozen other cities.

The announcement revealed that a new race of human beings, called mutants, has developed, and is banded together in an attempt to

win domination over the entire world.

A mutant, in the sense in which it is here used, is a human being who has undergone a sudden variation, the child differing from the parent, as opposed to the gradual change by which the human race has evolved to its present form. The variation, in this case, has not been noticeably physical; that is, a mutant is indistinguishable, so far as the eye is concerned, from any other human. The variation has been mental, with the mutant possessing certain skills which the normal human does not have—certain "wild talents," the announcement said.

(See adjoining column for full explanation of mutancy.)

The announcement (full text in column 4) said that the mutants had embarked upon a campaign to destroy the economic system of the world through the manufacture of certain items, such as the everlasting razor blade, the everlasting light bulb, the Forever car, the new prefabricated houses and the items generally sold in the so-called "gadget shops."

The mutant group, it was revealed, has been under investigation by various governmental and independent agencies for several years and the findings, when correlated, showed unmistakably that a definite campaign was under way to take over the entire world. The formal announcement of the situation, it was said, was delayed until there could be no doubt concerning the authenticity of the reports.

The announcement called upon the citizenry of the world to join in the fight to circumvent the plot. At the same time it pleaded for a normal continuation of all activity and advised against hysteria.

"There is no occasion for apprehension," the announcement said. "Certain countermeasures are being taken." There was no hint as to what any of these countermeasures might be. When the reporter attempted to question the spokesman concerning them, he was told that this was restricted information.

To aid the world governments in their campaign against the intentions of the mutants, the announcement said that every citizen should take these steps:

1—Keep your head. Do not give way to hysteria.

2—Refrain from using any mutant-manufactured items.

3—Refuse to buy any mutant-manufactured items. Persuade others against their use or purchase.

4—Immediately inform the FBI of any suspicious circumstances which might have a bearing upon the situation.

The announcement said that first suspicions of any attempt at domi-

(Continued on Page 11)

Vickers did not turn to Page 11. Instead, he studied the rest of the front page.

There was the story which explained mutation and the complete text of the announcement. There was a signed article by some professor of biology, dis-

cussing the probable effects of mutation and its hypothetical causes.

There were a half a dozen bulletins. They read:

NEW YORK (AP) — Mobs today swept through the city armed with axes and iron bars. They swarmed into gadget shops, destroying the merchandise, smashing the fixtures. Apparently no one was found in any of the shops. One man was killed, but it was not believed he was connected with a gadget shop.

WASHINGTON (UP)—A mob early today attacked and killed a man driving a Forever car. The car was smashed.

LONDON (INS)—The government today threw a heavy guard around several housing development projects containing a number of the prefabricated houses attributed to mutant manufacture.

"The people who purchased these houses," said an explanation accompanying the order, "purchased them in good faith. They are in no way connected or to be connected with the conspiracy. The guards were ordered to protect these innocent people and their neighbors against any misdirected public violence."

St. Malo, France (Reuters)—The body of a man was found hanging from a lamp post at dawn today. A placard with the crude lettering of "Mutant" was pinned to his shirt front.

VICKERS let the paper fall from his hand. It made a ragged tent upon the ground.

He stared out across the park. Morning traffic was flowing by on the roadway a block away. A boy came along a walk, bouncing a ball as he walked. A few pigeons circled down through the trees and strutted on the grass, cooing absently.

Normal, he thought. A normal morning, with people going to work and kids out playing and the pigeons strutting on the grass.

But underneath it was a current of savagery. Behind it all, behind the facade of civilization, the present was crouching in the cave, lying in ambush against the coming of the future. Lying in wait for himself and Ann and Horton Flanders.

Thank God, he thought, that no one had thought to connect him with the car. Perhaps, later on, someone would. Someone might remember seeing him get out of the car. Perhaps someone would fasten suspicion upon the man who, of all of them, had not run out of the restaurant and joined the mob around the car.

But for the moment he was safe. How long he would remain safe was another matter.

Now what?

He considered it.

Steal a car and continue his trip?

He didn't know how to steal a car; he would probably bungle it.

But there was something else—something that needed doing right away.

He had to get the top.

He had left it in the car and he'd have to get it back.

But why risk his neck to get the top?

It didn't make much sense. Come to think of it, it made no sense at all. Still, he knew he had to do it.

Crawford's warning about not driving the car hadn't made sense, either, at the time he read it. He had disregarded it and felt uneasy about disregarding it, had known, against all logic, that he was wrong in not paying it attention. And in this particular case, at least, logic had been wrong and his feeling—his hunch, his premonition, his intuition, call it what you would—had been right.

He had wondered, he remembered, if there might not be a certain sense which would outweigh logic and reason, if within his brain a man might not have another ability, a divining faculty, which would outdated the old tools of logic and of reason.

Maybe that was the sense that told him, without reason, without logic, that he must get back the top.

XXVIII

THE street had been blocked to traffic and the police were standing by, although there was little need of them, it seemed, for the crowd was orderly. The car lay in the middle of the street, battered and dented, with its wheels sticking into the air, like a dead cow in a cornfield. Its glass was shattered and strewn about the pavement, crunching under the feet of the milling crowd. Its tires were knocked off and the wheels were bent and people stood around and stared at it.

Vickers mingled with the crowd, moving nearer to the car. The front door, he saw, had somehow been smashed open and was wedged against the pavement. There was just a chance, he told himself, that the top might still be there.

If it was, he would have to figure out some way to get it. Maybe he could get down on his knees and pretend he was simply curious about the instrument panel or the controls. He'd tell his neighbors about how the control panel differed from that of an ordinary car and maybe he could hook in a hand and sneak out the top and hide it underneath his coat without any of them knowing.

He shuffled about the wreck,

gaping at it in what he hoped was an idly curious fashion as he talked a little with his neighbors, the usual banal comments of the onlooker.

He worked his way around until he was beside the door and squatted down and looked inside the car and he couldn't see the top. He stayed there, squatting and looking, craning his neck, and he told his nearest neighbor about the control panel and wondered about the shift, though all the time he was looking for the top.

But there wasn't any top.

He got up again and milled with the crowd, watching the pavement, because the top might have fallen from the car and rolled away from it. Maybe it had rolled into the gutter and was lying there. He searched the gutters on both sides of the streets, and covered the pavement, but there was no top.

So the top was gone—gone before he could try it out, and now he'd never know if it could take him into fairyland.

Twice he had gone into fairyland—once when he was a child and again when he had walked a certain valley with a girl named Kathleen Preston. He had walked with her in an enchanted valley that could have been nothing else but another fairyland, and after that he had gone

back to see her and had been told that she had gone away, and he had turned from the door and trudged across the porch.

"Now wait!" he said. Had he turned from the door and trudged across the porch?

HE tried to remember and, dimly, he saw it all again, the soft-voiced man who had told him that Kathleen was gone and then had said, "But won't you come in, lad? I have something you should see."

He had gone in and stood in the mighty hall, filled with heavy shadow, with its paintings on the wall and the massive stairs winding up to the other stories and the man had said—

What had he said?

Or had it ever happened?

Why did an experience like this, an incident that he should have remembered without fail, come back to him after all the years of not knowing, as the lost memory of his boyhood venture into fairyland had come back to him after so long?

And was it true or wasn't it?

There was no way that he could judge.

He turned away and walked down the street, past the policeman who leaned against a building and swung his club, smiling at the crowd.

In a vacant lot, a group of

boys were playing and he stopped to watch them. Once he had played like that, without thought of time or destiny, with the thought of nothing but happy hours of sunshine and the delight that bubbled up with living, for the day always ran on forever.

There was one little fellow who sat apart from all the others. He held something in his lap and was turning it around, admiring it, happy in the possession of a wondrous toy.

Suddenly he tossed it in the air and caught it and the sun flashed on its many colors. Vickers, seeing what it was, skipped a breath or two.

It was the missing top!

He left the sidewalk and sauntered across the lot.

The playing boys did not notice him or, rather, they ignored him, after the manner of the playing youngster for whom the adult does not exist, or is no more than a shadowy personage out of some unreal and unsatisfactory world.

Vickers stood above the boy who held the top.

"Hello, son."

"Hello yourself."

"What you got?"

"I found it," said the boy.

"It's a pretty thing," said Vickers. "I'd like to buy it from you."

"It ain't for sale."

"I'd pay quite a bit," said

Vickers, feeling desperate.

The boy looked up with interest.

"Enough for a new bicycle?"

Vickers dug into his pocket and pulled out folded bills.

"Gosh, mister . . ."

Out of the corner of his eye, Vickers saw the policeman standing on the sidewalk, watching him. The policeman took a step, started across the lot.

"Here," said Vickers.

He grabbed the top and tossed the folded bills into the boy's lap. He straightened and ran, heading for the alley.

"Hey, you!" the policeman shouted.

Vickers kept on running.

A gun exploded and Vickers heard the thin, high whine of a bullet going high over his head.

REACHING the first of the buildings in the alley, Vickers ducked around it, into a passageway between two buildings and realized that he'd turned in the wrong direction. The passageway would lead him back to the street on which lay the wrecked and battered car.

He saw an open basement window, gauged his distance and threw himself feet first through the window. The sill caught him in the back and he felt the fire of pain run along his body. Then his head smacked into something

and the basement was a place of darkness filled with a million stars. He came down sprawling and the wind was knocked out of him and the top, flying from his hand, bounced along the floor.

He clawed himself to his hands and knees and grabbed the top. He found a water pipe, grasped it and pulled himself erect. There was a raw place on his back that burned and his head buzzed with the violence of the blow. But he was safe, at least for a little while.

He found stairs and climbed them and saw that he was in the back room of a hardware store. The place was filled with haphazardly piled rolls of chicken wire, rolls of roofing paper, cardboard cartons, bales of binder twine, lengths of stove pipe, crated stoves, coils of manila rope.

He could hear people moving around up in front, but there was no one in sight. He ducked behind a crated stove and from the window above his head, a splash of sun came down, so that he crouched in a pool of light.

Outside, in the alleyway, he heard running feet go past and from far away he heard men shouting. He hunched down, pressing his body against the rough board crating of the stove and tried to control his labored breathing, afraid that anyone coming into the room might hear

his rasping breath.

He'd have to figure out some way to get away. If he stayed where he was, they finally would find him. They would start combing the area, police and citizen alike. And, by that time, they would know who it was they hunted. The boy would tell them he found the top lying near the car and someone then might remember seeing him park the car and the waitress in the restaurant might tell them how he stayed while the others raced outside. From many little bits of information, they would know their fugitive was the man whose **Forever** car they'd smashed.

He wondered what would happen to him when they found him, but he knew well enough, remembering the bulletin from St. Malo, about the man hanging from the lamp post with a placard on his chest.

But there was no way to escape. He couldn't sneak out into the alley, for they'd be watching for him. He could go back into the basement, but that wasn't any better than where he was. He could saunter into the store and act like a customer, finally walk out to the street, doing his best to look like an ordinary citizen who had dropped into the place to look at some gun or tool. But he doubted that he could carry it off.

So the illogic hadn't paid off, after all. Logic and reason were still the winners. There was no escape from this sunlit refuge behind the crated stove.

There was no escape, unless—
He had found the top again.
He had it there with him.

There was no escape—unless the top should work.

HE put the top's point on the floor and slowly pumped the handle. It picked up speed. He let go and it spun, whistling. He knelt in front of it and watched the colored stripes. He saw them come into being and he followed them into infinity and he wondered where they went. He forced his attention on the top, narrowing it down until the top was all he saw.

It didn't work. The top wobbled and he put out a hand and stopped it.

He tried again.

He had to be an eight-year-old. He must clear away his mind, sweep out all adult thoughts, all adult worry, all sophistication. He must become a child.

He thought of playing in the sand, of napping under trees, of the feel of soft grass beneath bare feet. He closed his eyes and concentrated and caught the vision and the color and the smell of it.

He opened his eyes and watch-

ed the stripes and filled his mind with wonder, with the question of their being and where they went when they disappeared.

It didn't work.

The top wobbled and he stopped it.

A frantic thought wedged its way into his consciousness. He didn't have much time. He had to hurry.

He pushed the thought away.

A child had no conception of time. He was a little boy and he had all the time there was and he owned a brand-new top.

He spun it again.

He knew the comfort of a home and loved parents and the playthings scattered on the floor and the story books that Grandma would read to him when she came visiting again. And he watched the top with a simple, childish wonder—watching the stripes come up and disappear, come up and disappear, come up and disappear—

HE fell a foot or so and thumped upon the ground and he was sitting atop a hill. The land stretched out before him for miles and miles and miles, an empty land of waving grass and groves of trees and far-off, winding water.

He looked down at his feet and the top was there, slowly spinning to a wobbling halt.

NEW and empty of any mark of Man, the land was raw of earth and sky. Even the wildness of the wind that swept across it seemed to say that the land was untamed.

From his hilltop, Vickers saw bands of dark, moving shapes that he felt sure were small herds of buffalo. Even as he watched three wolves came loping up the slope, saw him and veered off, angling down the hill. In the blue sweep of sky that arched from horizon to horizon without a single cloud, a bird wheeled gracefully, spying out the land. It screeched and the screech came down to Vickers as a high, thin sound filtered through the sky.

The top had brought him through. He was safe in this empty land with wolves and buffalo.

He climbed to the ridgetop and looked across the reaches of the grassland, with its frequent groves and many watercourses, sparkling in the sun. There was no sign of human habitation—no roads, no threads of smoke sifting up to the sky.

He looked at the sun and wondered which way was west and thought he knew, and if he was right, the sun said it was mid-morning. But if he was wrong, it

was afternoon and in a few hours darkness would come upon the land. And when darkness came, he would have to figure out how to spend the night.

He had meant to go into fairy-land. If he had stopped to think about it, he told himself, he would have known that it would not be, for the place he had gone to as a child could not have been fairyland. This was a new and empty world, lonely and perhaps dangerous, but it was better than the back room of a hardware store in some unknown town with his fellow men hunting him to death.

He sat down and emptied his pockets and made an inventory of what he had. A half a package of cigarettes; three packs of matches, one almost finished, one full, one with just a match or two gone from it; a pocket knife; a handkerchief; a billfold with some bills in it; a few cents in change; the key to the *Forever car*; a ring with the keys to the house and another to his desk and a couple of other keys he couldn't identify; a mechanical pencil; a few half sheets of paper folded together, pocket size, on which he had intended to make notes if he saw anything worth noting—and that was all. Fire and a tool with a cutting edge and paper money less useful than the blank paper and worthless

bits of metal.

If this world was empty, he must feed himself and defend himself and find shelter and, in time to come, contrive some way in which to clothe himself.

He lit a cigarette and tried to think, but all he could think about was that he must go easy on the cigarettes, for the half pack was all he had and when those were gone, there would be no more.

An alien land—but not entirely alien, for it was Earth again, the old familiar Earth unscarred by the tools of Man. It had the air of Earth and the grass and sky of Earth, and even the wolves

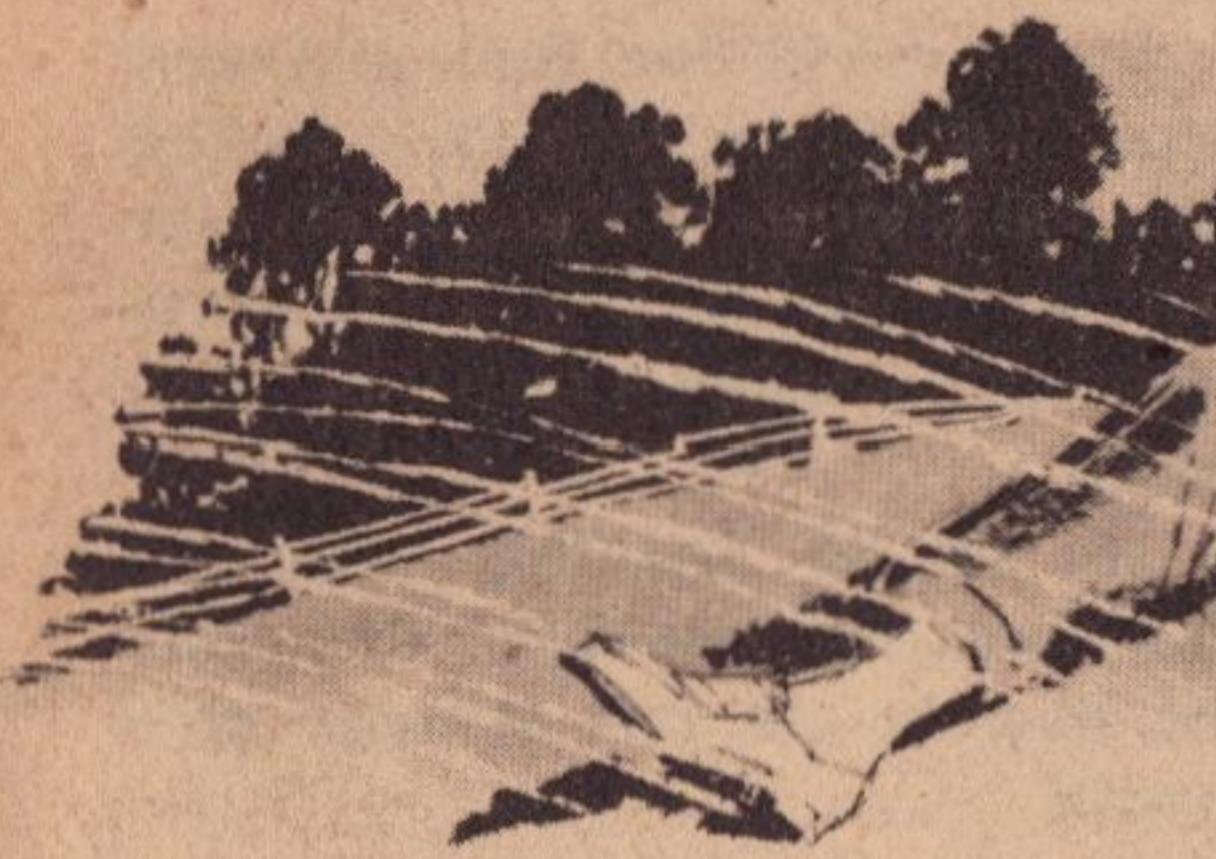
and buffalo were the same as old Earth had borne. Perhaps it was Earth. It looked for all the world as the primal Earth might have looked before Man had stripped and gutted it and torn all its treasures from it.

IT was no alien land—no alien dimension into which the top had flung him, although, of



course, the top hadn't had anything to do with it. It was simply something on which one focused one's attention, a hypnotic device to aid the mind in the job

which it must do. The top had helped him come into this land, but it had been his mind and that strange otherness that was



his which had enabled him to travel from old familiar Earth to this strange, primal world.

There was something he had heard or read.

He went searching for it, digging back into his brain with frantic mental fingers.

A news story? Something he had heard? Or something he had seen on television?

It came to him finally—the article about the man in Boston—a Dr. Aldridge, he seemed to remember who had said that there might be more worlds than one, that there might be an Earth a second ahead of ours and one a second behind ours and another a second behind that and still another and another and another,



a long string of worlds whirling one behind the other, like men walking in the snow, one man putting his foot into the other's track and the one behind him putting his foot in the same track and so on down the line.

A ring around the Sun.

He hadn't finished reading the story, he recalled, for something had distracted him and he'd laid the paper aside. He wished he hadn't. For Aldridge might have been right.

This might be the next world

after the old, familiar Earth.

He tried to puzzle out the logic of why there should be a ring of worlds around the Sun, but he gave it up, for he had no idea.

Say, then, that this was Earth No. 2, the next earth behind the original Earth which he had left behind. Say that in topographical features the earths would resemble one another, not exactly like one another, perhaps, but very close in their topography, with little differences here and there, each magnified in turn until probably a matter of ten earths back, the change would become noticeable. But this was only the second earth and its features might be but little changed and on old Earth he had been somewhere in Illinois and this was the kind of land that ancient Illinois would have been.

He had gone into fairyland and there had been a garden and a house in a grove of trees and maybe this was the very earth he had visited when he was a boy of eight. And in later years he had walked an enchanted valley and it, too, might have been this earth, and if that was true, then there was a Preston house exactly like the one which stood so proudly in the Earth of his childhood.

He knew there was little reason to believe there'd be a Preston house, little reason to think any-

thing other than that he was trapped in an empty, lonely world. But he shut his mind to reason, for the hope that there was a Preston house was the only hope there was.

He checked the Sun and saw that it had climbed higher in the sky, and that meant that it was morning and not afternoon, and by that he knew which way was west.

He set off, striding down the hill, heading toward the one hope he had in all this strange new world.

XXX

WELL before dark, he picked a camping site, a grove through which ran a stream.

He took off his shirt and tied it to a stick to form a crude seine, then went down to a small pool in the creek and after some experimenting found how to use the seine to the best advantage. At the end of an hour, he had five good-sized fish.

He cleaned the fish with his pocket knife and lit the fire with a single match and congratulated himself upon his woodsmanship.

He cooked one of the fish and ate it. It was not an easy thing to eat, for he had no salt and the cooking was very far from expert — part of the fish was charred by flame and the rest

was raw. But he was ravenous and it didn't taste too bad until the edge was off his hunger. After that it was a hard job choking down the rest, but he forced himself to do it, for he knew that he faced hard days ahead and to get through them he must keep his belly filled.

By this time, darkness had fallen and he huddled beside the fire. He tried to think, but he was too tired for thinking. He caught himself dozing as he sat.

He slept, awoke to find the fire almost out and the night still black, built up the fire while cold sweat broke out on him. The fire was for protection as well as warmth and cooking and on the day's march he had seen not only wolves, but bear as well, and once a large tawny shape moving too fast for him to make out what it was, except that it looked fiercely feline.

He woke again and dawn was in the sky. He built up the fire and cooked the rest of the fish, ate one and part of another, tucked the others, messy as they were, into his pocket. He would need food throughout the day, and he did not want to waste the time or matches to make a fire.

He hunted around the grove and found a stout, straight stick. It would serve him for a walking staff and might be of some use as a club if he were called upon to

defend himself. He checked his pockets to see that he was leaving nothing behind. He had his pocket knife and the matches and they were the important things. He wrapped the matches carefully in his handkerchief, then put them in his undershirt. He needed those matches, for he doubted very seriously that he could make fire with flint or sticks.

He was off before the Sun was up, slogging northwestward, but going more slowly than the day before, for now he realized that it was not speed but stamina that counted. To wear himself out in these first few days of hiking would be suicidal.

HE lost some time making a wide detour in the afternoon around a fair-sized herd of buffalo. He camped that night in another grove, having stopped an hour or so earlier beside a stream to catch another supply of fish with his shirt-and-staff seine. In the grove he found a few bushes of dewberries, with some fruit still on them, so he had dessert as well as fish.

The Sun came up and he moved on again.

And another day came up and he went on. And another and another.

He caught fish. He picked berries. He found a deer that had

been freshly killed, no doubt by some animal that his appearance had scared off. Hacking away with his pocket knife, he cut as many ragged hunks of venison as he could carry. Even without salt, the meat was a welcome change from fish. He even learned to eat a little of it raw, hacking off a mouthful and chewing it methodically as he walked along. He had to discard the last of the meat when it got so high that he couldn't live with it.

He lost track of time. He had no idea of how many miles he had covered, nor how far he might be from the place where he was heading, nor even if he could find it at all.

His shoes broke open and he stuffed them with dried grass and bound them together with strips cut off his trouser legs.

One day he knelt to drink at a pool and in the glass-clear water saw a strange face staring back at him. With a shock he realized that it was his own face, that of a bearded man, ragged and dirty and with the lines of fatigue upon him.

The days came and went. He moved ahead, northwestward. He kept putting first one foot out and then the other. The Sun burned him at first and the burn turned to a tan. He crossed a wide, deep river on a log. It took a long time to get across and

once the log almost spun and spilled him, but he made it.

He walked through an empty land, with no sign of habitation, although it was a land that was well suited for human occupation. The soil was rich and the grass grew tall and thick, and the trees, which sprang skyward from groves along the water-courses, were straight and towered high into the sky.

Then one day, just before sunset, he topped a rise and saw the land sweeping downward toward the distant ribbon of a river that he thought he recognized.

It was not the river which held his attention, but the flash of setting Sun on a large area of metal far away.

He put up his hand and shielded his eyes against the sunlight and tried to make out what it was, but it was too remote and it shone too brightly.

Climbing down the slope, not knowing whether to be glad or frightened, Vickers kept a close watch on the gleam of far-off metal. At times he lost sight of it when he dipped into the swales, but it was always there when he topped the rise again, so he knew that it was real.

Finally he was able to make out metallic buildings glinting in the Sun, and now he saw that strange shapes came and went in the air above them and that there

was a stir of life around them.

But it was not a city or a town. For one thing, it was too metallic. And for another, there were no roads leading into it.

AS he came nearer, he made out more and more of the detail of the place. When he was only a mile or two away, he stopped and looked at it and knew what it was.

It was not a city, but a factory, a giant, sprawling factory and to it came, continually, the strange flying things that probably were planes, but looked more like flying boxcars. Most of them came from the north and west and they came flying low, not too fast, to land in an area behind a screen of buildings that stood between him and the landing field.

And the creatures that moved about among the buildings were not men—or did not seem to be men, but something else, metallic things that flashed in the last rays of the Sun.

All about the buildings, standing on great towers, were cup-shaped discs many feet across and all the faces of the discs were turned toward the Sun and the faces of the discs glowed as if there were fires inside them.

He walked slowly toward the buildings and realized for the first time the sheer vastness of them. They covered acre after

acre and they towered many stories high and the things that ran among them on their strange and many errands were not men, nor anything like men, but self-propelled machines.

Some of the machines he could identify, but most of them he couldn't. He saw a carrying machine rush past with a load of lumber clutched within its belly and a great crane lumber by at thirty miles an hour with its steel jaws swinging. But there were others that looked like mechanistic nightmares and all of them went scurrying about in a terrific hurry.

He found a street, or, if not a street, an open space between two buildings, and went along it, keeping close to the side of one, for it would have been inviting death to walk down the center, where the machines were racing around.

He came to an opening in the building, from which a ramp led out to the street, and he cautiously climbed the ramp and looked inside. The interior was lighted, although he could not see where the light came from, and he looked down long avenues of machinery, busily at work. But there was no noise—that, he knew now, was what had bothered him. Here was a factory and it was utterly silent except for the sound of metal on the earth as the self-

propelled machines flashed along the street.

He left the ramp and went down the street, hugging the building, and came out on the edge of the airfield where the aerial boxcars were landing and taking off.

He watched the machines land and disgorge their freight, great piles of shining, newly sawed lumber, which were at once snatched up by the carrying machines and hustled off in all directions. Great gouts of raw ore, more than likely iron, were dumped into the maw of other carrying machines that looked, or so Vickers thought, like so many pelicans.

Once the boxcar had unloaded it took off again—took off without a single sound, as if a wind had seized and wafted it into the upper air.

The flying things came in endless streams, disgorging their endless round of cargo, which was taken care of almost immediately. Nothing was left piled up. By the time the machine had lifted into the air, the cargo it had carried had been rushed off somewhere.

Their operation was not automatic, for to have been automatic, each operation must have been performed at a certain place and at a regular time, and each ship did not land in exactly the

same place, nor was the time of their arrival spaced regularly. But each time a ship landed, the appropriate carrying machine would be on hand to take charge of the cargo.

LIKE intelligent beings, Vickers thought, and even as he thought of it, he knew that that was exactly what they were—robots, each designed to take care of its own particular task. Not the manlike robots of one's imagination, but practical machines with intelligence and purpose.

The Sun had set and as he stood at the corner of the building, he looked up at the towers which had faced it. The discs atop the towers were slowly turning back toward the east, so that when the Sun came up next morning, they would be facing it.

Solar power, thought Vickers—where else had he heard of solar power? Why, in the mutant-produced houses, the dapper little salesman had explained to Ann and him how, when you had a solar plant, you could dispense with public utilities.

And here again was solar power. Here, too, were frictionless machines that ran without the faintest noise, like the Forever car that would not wear out, but would last through many generations.

The machines paid no attention to him. It was as if they did not see him, did not suspect that he was there. Not one of them faltered as they rushed past him, not a single one had moved out of its way to give him a wider berth. Nor had any made a threatening motion toward him.

With the going of the Sun, the area was lighted, but once again he could not determine the source of the light. The fall of night did not halt the work. The flying boxcars, great, angular, boxlike contraptions, still came flying in, unloaded and flew off again. The machines kept up their scurrying. The long lines of machines within the buildings continued their soundless labor.

The flying boxcars, he wondered, were they robots, too? And the answer seemed to be that they probably were.

He edged his way onto the platform and looked at some of the crates closely, trying to determine what it was they held, but the only designations on them were stenciled code letters and numerals. He thought of prying some of them open, but he had no tools to do it, and he was just a bit afraid to do it, for while the machines continued to pay no attention to him, they might pay disastrous attention if he interfered.

Hours later, he came out on

the other side of the sprawling factory area and walked away from it, then turned back and looked at it and saw it glowing with its strange light and sensed the bustle of it.

He looked back at the factory and wondered what was made there and thought that he could guess. Probably razor blades and lighters and maybe light bulbs and perhaps the houses and the Forever cars. Maybe all of them.

For this, he felt certain, was the factory—or at least one of the factories—that Crawford and North American Research had been looking for and had failed to find.

No wonder, he thought, that they failed to find it.

XXXI

VICKERS came to the river late in the afternoon, a river filled with tree-covered, grape-vined islands, clogged with sand-bars and filled with wicked gurgling and the hiss of shifting sands. He was sure it could be no other stream than the Wisconsin, flowing through its lower reaches to join the Mississippi. And if that were so, he knew where he was going.

Now he feared that in this land there was no Preston house. Rather, he had fallen upon a strange land where there were no

men, only a complex robotic civilization in which Man played no part. There were no men connected with the factory, he was sure, for the place had been too self-sufficient to need the hand or the brain of Man.

He camped on the river's shore, and sat for a long time before he went to sleep, staring out over the silvered mirror of the moonlit water, feeling the loneliness strike into him, a deeper, more bitter loneliness than he'd ever known before.

When morning came, he'd go on; he'd tread the trail to its dusty end. He'd find the place where the Preston house should stand and when he found that there was no house—what would he do then?

He did not think about that. He did not want to think about it. He finally went to sleep.

In the morning he went down the river and studied the bluff-studded southern shore and was more sure than ever that he knew where he was.

He followed the river down and finally saw the misty blue of the great rock-faced bluff that rose at the junction of the rivers and the thin violet line of the cliffs beyond the greater river, so he climbed the nearest one and spied out the valley he had hunted.

He camped that night in the

valley and the next morning followed it and found the other branching valley that should lead to the Preston house.

He was halfway up it before it became familiar, although he had seen rock formations that seemed to bear some similarity to ones he had seen before.

The suspicion and the hope grew in him, and at last the certainty, that, here once again was the enchanted valley he had traveled twenty years before!

And now, he thought—now if the house is there.

He felt faint and sick at the certainty that it would not be there, that he would reach the valley's head and see where it should have been, but wasn't. For if that happened, he was an exile from Earth. He wouldn't know how to get back.

HE found the path and followed it and he saw the wind blow across the meadow grass so that it seemed as if the grass were water and the whiteness of its wind-blown stems were white-caps rolling on it. He saw the clumps of crab-apple trees and they were not in bloom because the season was too late, but they were the same nevertheless.

The path turned around the shoulder of a hill. Vickers stopped and looked at the house standing on the hill. He felt his

knees go wobbly beneath him and he looked away quickly, then brought his eyes back to make sure it was not imagination, that the house was really there.

It really was.

He started up the path and discovered that he was running and forced himself down to a rapid walk. And then he was running again and he didn't try to stop.

He reached the hill that led up to the house and he went more slowly now, trying to regain his breath, and he thought what a sight he was, with weeks of beard upon his face, with his clothing ripped and torn and matted with the dirt and filth of travel, with his shoes falling to shreds, tied upon his feet with strips of cloth from his trouser legs, with his frayed trousers blowing in the wind, showing dirt-streaked knees.

He came to the white picket fence and stopped beside the gate and leaned upon it, looking at the house. It was exactly as he had remembered it, neat, well-kept, with the lawn trimmed and flowers growing brightly, the woodwork newly painted and the brick a mellow color attesting to years of Sun upon it and the force of wind and rain.

"Kathleen," he said, and he couldn't say the name too well, for his lips were parched and rough. "I've come back again."

He wondered what she'd look like, after all these years. He must not, he warned himself, expect to see the girl he once had known, the girl of seventeen or eighteen, but a woman near his own age.

She would see him standing at the gate and even with the beard and the tattered clothes and the weeks of travel on him, she would know him and would open the door and come down the walk to greet him.

The door opened and the Sun was in his eyes so that he could not see her until she'd stepped out on the porch.

"Kathleen," he said.

But it wasn't Kathleen.

It was someone he'd never seen before—a man who had on almost no clothes at all and who glittered as he walked down the path and who said to Vickers, "Sir, what can I do for you?"

XXXII

THERE was something about the glitter of the man, something about the way he walked and the way he talked that didn't feel right. He had no hair, for one thing, either on his head or on his chest. His eyes were funny, too. They glittered like the rest of him and he seemed to have no lips.

"I'm a robot, sir," he explained,

seeing Vickers' puzzlement.

"Oh," said Vickers.

"My name is Hezekiah."

"How are you, Hezekiah?" Vickers asked inanely, not knowing what else to say.

"I'm all right," replied Hezekiah. "I am always all right. There is nothing to go wrong with me. But thank you for asking, sir."

"I had hoped to find someone here," said Vickers. "A Miss Kathleen Preston. Does she happen to be home?"

He watched the robot's eyes and there was no answer in them.

The robot asked, "Won't you come in, sir, and wait?"

"Why, certainly," said Vickers.

The robot held the gate open for him and he came through, walking on the path of mellowed brick, and he noticed how tidy the house was. The windows sparkled with the cleanliness of a recent washing and the shutters hung true and straight and the trim was painted and the lawn looked as if it had not been only mowed, but razored. Gay beds of flowers bloomed without a single weed and the picket fence marched its eternal guard around the house straight as wooden soldiers and painted gleaming white.

The robot went up the steps to the little porch that opened on the side entrance and pushed the door open for Vickers.

"To your right, sir," Hezekiah said. "Take a chair and wait. If there is anything you wish, there is a bell upon the table."

"Thank you, Hezekiah," said Vickers.

The room was large. It was gaily papered and had a small marble fireplace with a mirror over the mantle and there was a sort of official hush, as if the place might be an antechamber for important conferences.

Vickers took a chair and waited.

What had he expected? Kathleen bursting from the house and running down the steps to meet him, happy after twenty years of never hearing from him? He shook his head. It didn't work that way. It wasn't logical that it should.

But there were other things that were not logical, either, and they had worked out. It had not been logical that he should find this house in this other world, and still he had found it and now sat beneath its roof and waited. It had not been logical that he should find the top he had not remembered and, finding it, know what to use it for. But he had found it and he had used it and was here.

HE sat quietly, listening to the house.

There was a murmur of voices

in the room that opened off the waiting room and he saw that the door which led into it was open an inch or two.

There was no other sound. The house lay in morning quiet.

He got up from his chair and paced to the window and from the window back to the marble fireplace.

Who was in that other room? Why was he waiting? Whom would he see when he walked through that door and what would they say to him?

He stopped beside the door, standing with his back against the wall, holding his breath to listen.

THE murmur of voices became words.

"... going to be a shock."

A deep, gruff voice said, "It always is a shock. There's nothing you can do to take the shock away. No matter how you look at it, it always is degrading."

A slow, drawling voice said, "It's unfortunate that we have to work it the way we do. It's too bad we can't let them go on in their rightful bodies."

Businesslike; clipped, precise, the first voice said, "Most of the androids take it fairly well. Even knowing what it means, they take it fairly well. We make them understand. And, of course, out of the three, there's always

the lucky one, the one that can go on in his actual body."

"I have a feeling," said the gruff voice, "that we started in on Vickers just a bit too soon."

"Flanders said we had to. He thinks Vickers is the only one who can handle Crawford."

And Flanders' voice saying, "I am sure he can. He was a late starter, but he was coming fast. We gave it to him hard. First the bug got careless and he caught it and that set him to thinking. Then, after that, we arranged the lynching threat. Then he found the top we planted and the association clicked. Give him just another jolt or two . . ."

"How about the girl, Flanders? That—what's her name?"

"Ann Carter," Flanders said. "We've been jolting her a bit, but not as hard as Vickers."

"How will they take it?" asked the drawling voice, "when they find they're android?"

Vickers lurched away from the door, groping with his hands, as if he were walking in the dark through a room filled with furniture.

Used, he thought.

Not even human.

"Damn you, Flanders!" he said. "Damn you for a smirking heel!"

Not only he, but Ann—they were both androids.

He had to get away, he told

himself. He had to find a place where he could hide and let his mind calm down and plan what he meant to do.

For he was going to do something. It wasn't going to stay this way. He'd deal himself a hand and cut in on the game.

He moved along the hall and reached the door and opened it a crack to see if anyone was there. The lawn was empty. There was no one in sight.

He went out the door and closed it gently behind him and when he hit the ground, jumping from the tiny porch, he was running. He went over the fence.

He didn't look back until he reached the trees. When he did, the house stood serenely, majestically, on its hilltop at the valley's head.

XXXIII

SO he was an android, an artificial man, a body made out of a handful of chemicals and the cunning of Man's mind and the wizardry of Man's technique—but ordinary, normal men had no such cunning and no such technique. The mutants did. They could make an artificial man and make him so well and cleverly that even he, himself, would never know for sure. And artificial women, too—like Ann Carter.

The mutants could make androids and robots and Forever cars and everlasting razor blades and a host of other gadgets, all designed to wreck the race from which they sprang. They had synthesized the carbohydrate as food and the protein to make the bodies of their androids, and they knew how to travel from one earth to another—all those earths that ringed the Sun. This much he knew they could do and were doing. What other things they might be doing, he had no idea. Nor any idea, either, of the things they dreamed or planned.

"You're a mutant," Crawford had told him. "You're one of them." For Crawford had a machine that could pry into the mind and tell its owner what was in that mind, but the machine was stupid in the last analysis, for it couldn't even tell a real man from a fake.

No mutant, but a mutant's errand boy. Not even a man, only an artificial copy.

How many others, he wondered, could there be like him? How many of his kind were trailed and watched by Crawford's men, unaware that they did not trail and watch the mutant, but a thing of mutant manufacture? That, thought Vickers, was the true measure of the difference between the normal man and mutant—the normal man could mis-

take the mutant's scarecrow for the mutant.

The mutants made a man and turned him loose and watched him and allowed him to develop and set a spying mechanism that they called a bug to watch him, a little mechanical mouse that could be smashed with a paper-weight.

And in the proper time they jolted him—jolted him for what? They stirred up his fellow townsmen so he fled a lynching party; they planned for him to find a toy out of childhood and waited to see if the toy might not trip a childhood association; they fixed it so he would drive a *Forever* car when they knew that driving such a car could cause him to be mobbed.

And after they had jolted an android, what happened to him then?

What became of the androids once they had been used for the purpose of their making?

He had told Crawford that when he knew what was going on, he'd talk to him again. And now he knew something of what was going on and Crawford might be very interested.

He walked on through the woods, with its massive trees and its deep-laid forest mold and thick matting of old leaves, with its mosses and its flowers and its strange silence filled with uncar-

ing and with comfort.

He had to find Ann Carter. He had to tell her. Together, the two of them would somehow stand against it.

He halted beside the great oak tree and stared up at its leaves and tried to clear his mind, to wipe it clean of the chaos of his thinking so he could start fresh again.

There were two things that stood out above all others:

He had to get back to the parent Earth.

He had to find Ann Carter.

XXXIV

HE did not see the man until the voice startled him into turning.

"Good morning, stranger," said the man, standing just a few feet away, a great, tall, strong man dressed much as a farm hand or a factory worker, but with a jaunty, peaked cap and a brilliant feather stuck into it.

Despite the rudeness of his clothing, there was nothing of the peasant about the man, but a cheerful self-sufficiency that reminded Vickers of someone he'd read about and he tried to think who it might be, and he thought of Robin Hood.

Across the man's shoulder was a strap that held a quiver full of arrows and in his hand he held

a bow. Two young rabbits hung lifeless from his belt and the blood dripping from them had smeared his trouser leg.

"Good morning," said Vickers, shortly.

He didn't like the idea of this man popping up from nowhere.

"You're another one of them," the man said.

"Another one of what?"

The man laughed. "We get one of you every once in a while. Someone who has blundered through and doesn't know where he is. I've often wondered what happened to them before we were settled here or what happens to them when they pop through a long way from any settlement."

"I don't know what you're talking about."



"Another thing you don't know," said the man, "is where you are."

"I have a theory," Vickers retorted. "This is a second earth."

"You got it pegged pretty close. You're better than most of them. They just flounder around and gasp and won't believe it when we tell them this is earth number two."



"That's neat," said Vickers. "Earth Number Two, is it? And what about Number Three?"

"It's there, waiting until we need it. Worlds without end, waiting until we need them. We can go on pioneering for generation after generation. A new earth for each new generation if we have to, but they say we won't be needing them that fast."

"They?" challenged Vickers. "Who are they?"

"The mutants," said the man. "The local ones live in the Big House. You didn't see the Big House?"

VICKERS shook his head warily.

"You must have missed it, coming up the ridge. A big brick place with a white picket fence around it and other buildings that look like barns, only they aren't barns."

"Aren't they?"

"No," said the man. "They are laboratories and experimental buildings and there is one building that is fixed up for listening."

"Why do they have a place for listening? Seems to me you could listen almost anywhere. You and I can listen without having a special place fixed up for us."

"They listen to the stars," the man told him.

"They listen . . ." began Vickers, and then remembered Flan-

ders sitting on the porch in Cliffwood, rocking in the chair and saying that great pools and reservoirs of knowledge existed in the stars, that it was there for the taking and you might not need rockets to go there and get it, but might reach out with your mind and that you'd have to sift and winnow, but you'd find much that you could use.

"Telepathy?" asked Vickers.

"That's it," said the man. "They don't listen to the stars really, but to people who live on the planets of the stars. Now ain't that the screwiest thing you ever heard of—listening to the stars!"

"Yes, I guess it is."

"But they get ideas from these people. They don't talk to them, I guess, just listen in on them. They catch some of the things they're thinking and some of the things they know and a lot of it can be used and a lot of it don't make no sense at all. But it's the truth, so help me, mister."

"My name is Vickers. Jay Vickers."

"Well, I'm glad to know you, Mr. Vickers. My name is Asa Andrews."

He held out his hand and Vickers took it and his grip was hard and sure.

And now he knew that this was no Robin Hood. Here before him stood an American pioneer, the

man who carried the long rifle from the colonies to the hunting grounds of Kentucky. Here were the alert stance, the independence, the quick good will and wit, the steady self-reliance. Here, once again, in the forests of Earth No. 2, was another pioneer type, sturdy and independent and a good man for a friend.

"These mutants must be the people who are putting out the everlasting razor and all that other stuff in the gadget shops," said Vickers.

"You catch on quick," said Andrews. "We'll go up to the Big House in a day or two and you can talk to them."

HE shifted the bow from one hand to another. "Look, Vickers, did you leave someone back there? A wife and some kids, maybe?"

"No one," said Vickers. "Not a single soul."

"If you had, we'd have gone up to the Big House right away and told them about it and they would have fixed it up to bring the wife and kids through, too. That's the only thing about this place—once you get here, there's no going back. Although why anyone would want to go back is more than I can figure out. So far as I know, no one has wanted to."

He looked Vickers up and

down, laughter tugging at his mouth.

"You look all gaunted down," he said. "You ain't been eating good."

"Just fish and some venison I found. And berries."

"The old lady will have the victuals on. We'll get some food into you and those whiskers off and I'll have the kids heat up some water and you can take a bath, and then we can sit and talk. We got a lot to talk about."

He led the way, with Vickers following, down the ridge through the heavy timber.

They came out on the edge of a cleared field green with growing corn.

"That's my place down there," said Andrews. "Down at the hollow's head. You can see the smoke."

"Nice field of corn you have," Vickers said.

"Knee-high by the Fourth. And over there is Jake Smith's place. You can see the house if you look a little close. And just beyond the hogsback are John Simmon's fields. There are other neighbors, but you can't see from here."

They climbed the barbed wire fence and went across the field, walking between the corn rows.

"It's different here," said Andrews, "than back on Earth. I was working in a factory there

and living in a place that you wouldn't keep animals in. Then the factory shut down and there was no money. I went to the carbohydrates people and they kept the family fed. Then the landlord threw us out. The carbohydrates people had been so friendly that I went to them and told them what had happened. They were the only ones I knew of that I could turn to. After a day or two, one of them came around and told us about this place—except, of course, he didn't tell us what it really was. He said it was a brand-new territory that was opening up and there was free land for the taking and help to get you on your feet and that I could make a living and have a house instead of a two-by-four apartment in a stinking tenement and I said that we would go. He warned me that if we went, we couldn't come back again and I asked him who would want to?"

"You've never regretted it?" asked Vickers.

"It was the luckiest thing that ever happened to us. Fresh air for the kids and all you want to eat and a place to live with no landlord to throw you out. No dues to pay and no taxes to scrape up. Just like in the history books."

"The history books?"

"When America was opened

up and the pioneers piled in. Land for the taking. More land than anyone can use, so rich you just scratch the ground a little and throw in some seed and you got a crop. Land to plant things in and wood to burn and build with and you can walk out at night and the sky is full of stars and the air is so clean it seems to hurt your nose when you draw it in."

ANDREWS turned and looked at Vickers, his eyes hard.

"It was the best thing that ever happened to me," he said, as if daring Vickers to contradict him.

"But these mutants," said Vickers. "Don't they get into your hair? Don't they lord it over you?"

"They don't do anything but help us. They send us a robot to help out with the work when we need to have some help and they send a robot that lives with us nine months of the year to teach the kids. One robot teacher for each family. Now ain't that something? Your own private teacher, just like you went out and hired yourself a high-toned private tutor like the rich folks back on Earth."

"And you don't resent these mutants? You don't hate them because they know more than you do?"

"Mister," said Asa Andrews, "you don't want to let anyone around these parts hear you talking like that. When we first came, they explained it all to us. They had indoct—indoctrin—"

"Indoctrination courses."

"That's it. They told us what the score was. They explained the rules. There aren't many."

"Like not having any firearms," said Vickers.

"That's one of them. How did you know that?"

"You're hunting with a bow."

"Another one is that if you get into a row with anybody and can't settle it peaceable, the two of you go up to the Big House and let them settle it. And if you get sick, you're to let them know right away so they can send you a doctor and whatever else you need. The rules work to your benefit."

"How about work?"

"Work?"

"You have to earn some money, don't you?"

"Not yet," said Andrews. "The mutants give us everything we want or need. All we do is grow the food. This is what they call—what was that word? — this is what they call the pastoral-feudal stage. You ever hear a word like that?"

"But they must have factories," Vickers persisted, ignoring the question. "Places where they

make the razor blades and stuff. They'd need men to work in them."

"They use robots. Just lately they started making a car that can last forever. The plant is just a distance from here. But they use robots to do the entire job. You know what a robot is."

"Yes, I know," said Vickers.

They climbed the fence that edged the corn field and walked across a pasture toward the house.

Someone yelled a joyous greeting and a half a dozen kids came running down the hill, followed by yelping dogs. A woman came to the door of the house, built of peeled logs. She waved to them and Andrews waved back and then the kids and dogs descended on them in a yelping, howling, happy pack.

XXXV

VICKERS lay in bed, in the loft above the kitchen, and listened to the wind pattering on bare feet across the shingles just above his head. He turned and burrowed his head into the goose-down pillow and beneath him the corn-shuck mattress rustled in the dark.

He was clean, washed clean in the tub behind the house, with water heated in a kettle on an outdoor fire, lathering himself

with soap while Andrews sat on a nearby stump and talked and the children played in the yard and the dogs lay sleeping in the Sun, twitching their hides to chase away the flies.

He had eaten, two full meals of food such as he had forgotten could exist after days of half-cooked fish and half-rotten venison—cornbread and sorghum and young rabbits fried in a smoking skillet, with creamed new potatoes and greens the children had gone out and gathered and a salad of watercress pulled from the spring below the house and for supper fresh eggs just taken from the nest.

He had shaved, with the children ringed around him watching, after Andrews had seated him on a stump and had used the scissors to trim away the beard.

And after that he and Andrews had sat on the steps and talked. Andrews had said that he knew of a place that was crying for a house—a tucked-in place just across the hill, with a spring a step or two away and some level ground on a bench above the creek where a man could lay out his fields. There was wood in plenty for the house, great, tall trees, and Andrews said that he would help him cut them. When the logs were ready, the neighbors would come in for the raising and Jake would bring along

some of the corn that he'd been cooking and Ben would bring his fiddle and they'd have themselves a hoedown when the house was up. If they needed help beyond what the neighbors could supply, all they'd have to do was send word up to the Big House and the mutants would send a gang of robots. But that probably wouldn't be necessary, Andrews had said. The neighbors were a willing lot and always ready to help; glad, too, to see another family moving in.

Once the house was built, said Andrews, Simmons had some daughters that Vickers might want to have a look at, although you could do your picking blind if you wanted to, for they were a likely lot. Andrews had dug Vickers in the ribs with his elbow and had laughed uproariously and Jean, Andrews' wife, who had come out to sit with them a while, had smiled shyly at him and then had turned to watch the children playing in the yard.

After supper, Andrews had showed him with some pride the books on the shelf in the living room and had said that he was reading them, something he had never done before—something he had never wanted to do before, nor had the time to do. Vickers, looking at the books, had found Homer and Shakespeare, Montaigne and Austen, Thoreau and

Steinbeck.

"You mean you're reading these?" he asked.

Andrews had nodded. "Reading them and liking them, mostly. Once in a while I find it a little hard to wade through them, but I keep at it. Jean likes Austen best."

It was a good life here, said Andrews, the best life they'd ever known and Jean smiled her agreement and the kids had lost an argument about letting the dogs come in and sleep the night with them.

HERE again was the American frontier, but idealized and bookish, with all the frontier's advantages and none of its terror and its hardship. Here was a paternal feudalism, the Big House on the hill serving as the castle that looked down across the fields where happy people took their living from the soil. Here was a time for resting and for gathering strength. And here was peace. No talk of war, no taxes to fight a war, or to prevent a war by a proved willingness to fight.

Here was—what had Andrews said?—the pastoral-feudal stage. And after that came what stage? The pastoral-feudal stage for resting and thinking, for getting thoughts in order, for establishing once again the bond between

Man and soil, the stage in which was prepared the way for the development of a culture that would be better than the one they had left.

This was one earth of many earths. How many others? Hundreds, thousands, millions? Earth following earth, and now all the earths lay open.

He tried to figure it out and he thought he saw the pattern that the mutants planned. It was simple and it was brutal, but it was workable.

There was an Earth that was a failure. Somewhere, on the path that led up from apedom, they had taken the wrong turning and had traveled since that day a long road of misery. There was brilliance in these people, and goodness, and ability—but they had poured their brilliance and their ability into channels of hate and arrogance and their goodness had been buried in selfishness.

They were worth the saving, as a drunkard or a criminal is worthy of rehabilitation. But to save them, you must get them out of the neighborhood they live in, out of the slums of human thought and method.

To do this, you must break the world they live in and you must have a plan to break it and after it is broken, you must have a program that leads to a better world.

But first of all, there must be a plan of action.

FIRST you shattered the economic systems on which old Earth was built. You shattered it with Forever cars and everlasting razor blades and with synthetic carbohydrates that would feed the hungry. You destroyed industry by producing things that industry could not duplicate and when you shattered industry, war was impossible and half the job was done.

But then you left people without jobs, so you fed them with carbohydrates while you tried to ferry them to the following earths that lay waiting for them. If there wasn't room enough on Earth No. 2, you sent some of them to No. 3 and maybe No. 4, so that you had no crowding, so there was room enough for all. On the new earths there was a beginning again, a chance to dodge the errors and skirt the dangers that had bathed Old Earth in blood for countless centuries.

On these new earths you could build any sort of culture that you wished. You could even experiment, aim at one culture on Earth No. 2 and a slightly different one on No. 3 and yet a different one on No. 4. And after a thousand years or so, you could compare these cultures and see

which one was best and consult the bales of data you had kept and pinpoint each mistake in each particular culture. In time you could arrive at a formula for the best in human cultures.

Here on this earth, the pastoral-feudal culture was only the first step. It was a resting place for education and for settling down. Things would change or be changed. The son of the man in whose house he lay would build a better house and probably would have robots to work his fields, while he himself would live a leisured life. Out of a leisured people, with their energies channeled by good leadership, would come paradise on Earth—or on many earths.

There had been that article in the paper he had read on that morning—was it only days ago?—which had said that the authorities were alarmed at mass disappearances. While families were dropping out of sight for no apparent reason and with nothing in common except abject poverty. And, of course, it would be the very poor who would be taken first—the homeless and the jobless and the sick—to be settled on these earths that followed in the track of the dark and bloody world inhabited by Man.

Soon there would be little more than a handful of people on the

dark and bloody Earth. Soon, in a thousand years or less, it would go tumbling on its way alone, its hide cleansed of the ravening tribe which had eaten at it and mangled it and ravished it. This same tribe would be established on other earths, under better guidance, to create for themselves a better life.

Beautiful—and yet there was this matter of the androids.

BEGIN at the beginning, he told himself. Start with first facts, try to see the logic of it, to figure out the course of mutation.

There always had been mutants. If there had not been, Man would still be a little skittering creature hiding in the jungle.

There had been the mutation of the opposable thumb. There had been mutations within the little brain that made for creature cunning. Some mutation, unrecorded, had captured fire and tamed it. Another mutation had evolved the wheel. Still another had invented the bow and arrow. And so it went, on down the ages, mutation on mutation, building the ladder that mankind climbed.

Except that the creature who had captured and tamed the flame did not know he was a mutant. And neither had the tribesman who had thought up

the wheel, nor the bow and arrow experimenter.

Down through the ages there had been unsuspected and unsuspecting mutants — men who were successful beyond the success of others, great business figures or great statesmen, great writers, great scientists and artists, men who stood so far above the herd of their fellow men that they had seemed like giants in comparison.

Perhaps not all of them were mutants, but some of them would have been. But their mutancy would have been a crippled thing in comparison with what it could have been, for they were forced to conform to the social and economic pattern set by a non-mutant society. That they had been able to conform, to fit themselves to a smaller measure than their normal stature, that they had been able to get along with men who were less than they and still stand out as men of towering ability was in itself a measure of their mutancy.

Although their success had been large in the terms of normal men, their mutancy had been a failure in that it never reached its full realization and this was because these men had never known that they were mutants. They had been just a little smarter or a little handier or somewhat quicker than the com-

mon run of mankind.

But suppose that a man should know from a piece of indisputable evidence that he was a mutant what would happen then?

Suppose, for example, a man should find that he could reach out to the stars and that he could catch the thoughts and plans of the thinking creatures who lived on planets circling those far suns—that would be full and sufficient proof that he was a mutant. And if he could obtain from his seeking in the stars some specific information of certain economic value—say, the principle of a frictionless machine—then without question he would know that he had a mutant gift. Once knowing that he was a mutant, he would not be able to fit so snugly, nor so smugly, into his contemporary niche as those men who had been mutants, but had never known they were. Knowing that he was a mutant, he would have the itch of greatness, would know the necessity of following his own path and not the beaten path.

HE might be slightly terrified by the things he learned winnowing the stars and he might be terribly lonesome and he might see the necessity of other humans than he alone working on the information that he was

dredging from the depths of space.

So he would seek for other mutants and he would do it cleverly and it might take him a long time before he found one of them and he would have to approach the other mutant cautiously and win his confidence and finally tell him what he had in mind. Then there'd be two mutants, banded together, and they would seek other mutants. Not all of them would be able to send their minds out to the stars, but they would be able to do other things. Some of them would understand electronics, almost as if by instinct, more completely than any normal man, even with years of intensive training, and another might sense the strange alignment of time and space that allowed for other worlds than one, circling the Sun like a cosmic ring of planets.

Some of the mutants would be women and to the mutants found would be added mutants born, and eventually there would be a mutant organization of several hundred persons, pooling their talents.

From the information they gathered from the stars, plus the mutant abilities of certain others of them, they would invent and market certain gadgets that would bring in the necessary money for them to continue with their work.

How many of the now common, workaday, almost prosaic gadgets used in the world today, Vickers wondered, were the products of this mutant race?

But the time would come when the mutant organization and the work they did would become too challenging to pass unnoticed and the mutants would seek a place to hide—a safe place where they could continue the work that they were doing. And what safer place could there be than one of those other earths?

VICKERS lay on the corn-shuck mattress and stared into the darkness and wondered at the glibness of his imagination, with the nagging feeling that it was not imagination—that it was something that he knew. But how could he know it?

Conditioning, perhaps, of his android mind. Or an actual knowledge gained in some period of his life that had been blotted out, as the time he had gone into fairyland at the age of eight had been—a knowledge that now was coming back again, as the remembrance of the visit to fairyland had finally returned.

Or ancestral memory, perhaps, actual specific memory passed to child from parent as instinct was passed—but the catch was that, as an android, he didn't have a parent.

He was parentless and raceless and a mockery of a man, created for a purpose he did not even know.

What purpose could the mutants have for him? What talent did he possess that made him useful to them?

That was the thing that hurt—that he should be used for some purpose which he did not know, that Ann should have some purpose she did not even guess.

The work of the mutants was more important than mere gadgetry, something greater than forever cars and everlasting razor blades and synthetic carbohydrates. Their work was the rescue and the re-establishment of the race—the starting over again of a badly muddled humanity. It was the development of a world or worlds where war would not be merely outlawed, but impossible, where fear would never raise its head, where progress would have a different value than it had in mankind's world today.

And into a program of this sort, where did Jay Vickers fit?

The mutants would take from the human race the deadly playthings and keep those playthings in trust until the child of Man was old enough to use them without hurting himself or injuring his neighbor. They would take from the three-year-old the twelve-year-old toy he was using

dangerously and when he was twelve years old would give it back again, probably with refinements.

And the culture of the future, under mutant guidance, would be not merely a mechanistic culture, but a social and an economic and an artistic and spiritual culture as well. The mutants would take lopsided Man and mold him into balance and the years that were lost in the remolding would pay interest in humanity in the years to come.

But that was speculation; that was getting nothing done. The thing that counted now was what he, Jay Vickers, android, meant to do about it. What was the role that he was to play?

Before he did anything about it, he needed information and he couldn't get it here, lying on a corn-shuck mattress in the loft above the kitchen of a neopioneer home.

There was only one place where he could get that information.

He slid noiselessly out of bed and fumbled in the dark to find his ragged clothes.

XXXVI

THE house was dark, sleeping in the moonlight, with the tall shadows of the trees cast against its front. He stood in the

shadow just outside the front gate and looked at it, remembering how he had seen it in the moonlight once before, when a road ran past the gate, but now there was no road. He recalled how the glow had fallen on the whiteness of the pillars and had turned them to ghostly beauty and of the words the two of them had said as they stood and watched the moonlight shattered on the pillars.

But that was dead and done. All that was left was the bitterness of knowing that he was not a man, but the imitation of a man.

HE opened the gate, went up the walk and climbed the steps that led to the porch. He crossed the porch and his footsteps rang so loudly in the stillness that he felt certain those in the house would hear him.

He found the bell and put his thumb upon it and pressed, then stood waiting, as he had waited once before. But this time there would be no Kathleen to come to the door to greet him.

He waited and a light sprang into life in the central hall and through the glass he saw a man-like figure fumbling at the door. The door came open and he stepped inside and the gleaming robot bowed a little stiffly and said, "Good evening, sir."

"Hezekiah, I presume," said Vickers.

"Hezekiah, sir," the robot confirmed. "You met me this morning."

"I went for a walk."

"And now perhaps I could show you to your room."

The robot turned and went up the winding staircase, with Vickers following him.

"It's a nice night, sir," the robot said.

"Very nice."

"You have eaten, sir?"

"Yes, thank you."

"I could bring you up a snack," Hezekiah offered. "I believe there is some chicken left."

"No," said Vickers. "Thank you just the same."

Hezekiah shoved open a door and turned on a light, then stepped aside making room for Vickers to go in.

"Perhaps," said Hezekiah, "you would like a nightcap."

"That's a good idea. Scotch, if you have it handy."

"In just a moment, sir. You will find some pajamas in the third drawer from the top. They may be a little large, but probably you can manage."

He found the pajamas and they were fairly new and very loud and they seemed quite a bit too big, but they were better than nothing and Vickers laid them out.

THE room was pleasant, with a huge bed covered by a white, stitched counterpane and the white curtains at the windows blew in on the night breeze.

He sat down in a chair to wait for Hezekiah and the drink and for the first time in many days he knew how tired he was. He'd have the drink and climb into bed and when morning came he'd go stomping down the stairs, looking for a showdown.

The door opened and he turned to take the drink from Hezekiah.

It wasn't Hezekiah; it was Horton Flanders, in a crimson dressing robe fastened tight about his neck, and slippers on his feet that slapped against the floor as he crossed the room.

He sat down in another chair and looked at Vickers, with a half smile on his face.

"So you came back," he said.

"I came back to listen," Vickers told him. "You can start talking right away."

"That's why I got up. As soon as Hezekiah told me you had arrived, I knew you'd want to talk."

"I don't want to talk," said Vickers. "I want to listen."

"Yes, certainly. I am the one to do the talking."

"And not about the reservoirs of knowledge, of which you sermonize most beautifully, but

specific practical, rather mundane things."

"Like what?"

"Like why I am an android and why Ann Carter is, also. And whether there ever was a person named Kathleen Preston or is that just a story that was conditioned in my mind? And if there actually was a Kathleen Preston, where is she now? And, finally, where do I fit in and now that I'm here what do you intend to do?"

FLANDERS nodded his head. "A very admirable set of questions. You *would* pick the ones I can't answer."

"I came to tell you that the mutants are being hunted down and killed on that other world, that the gadget shops are being wrecked and burned, that the normal humans are finally fighting back. I came to warn you because I thought I was a mutant, too . . ."

"You are a mutant. I can assure you, Vickers, you're a very special kind of mutant."

"A mutant android."

"You are difficult," said Flanders. "You let your bitterness—"

"Of course I'm bitter," Vickers cut in. "Who wouldn't be? All my life I believed I was a man and now I find I'm not."

"You fool! You don't know what you are!"

HEZEKIAH rapped on the door and came in with a tray. He set it on a table and Vickers saw that there were two glasses and some mix and an ice bucket and a fifth of liquor.

"Now," said Flanders, happily, "perhaps we can talk some sense. I don't know what it is about the stuff, but put a drink into a man's hand and you tend to civilize him."

He reached into the pocket of his robe, brought out a pack of cigarettes and passed them to Vickers. Vickers took the pack and saw that his hand was shaking a little as he pulled out a smoke. He hadn't realized until then just how keyed-up he was.

Flanders snapped the lighter and held out the flame. Vickers got his light.

"That's good," he said. "I ran out of smokes after the fourth day."

He sat in the chair, smoking, thinking how good the tobacco tasted, feeling the satisfaction run along his nerves. He watched Hezekiah busy with the drinks.

"I eavesdropped this morning," Vickers said. "I came here and Hezekiah let me in. I listened when you and some others were talking in the room."

"I know you did," said Flanders.

"How much of that was staged?"

"All of it," said Flanders, blithely. "Every blessed word of it."

"You wanted me to know I was an android?"

"We wanted you to know."

"You set the mouse on me?"

"We had to do something to shake you out of your humdrum life. And the mouse served a special purpose."

"It tattled on me."

"Oh, exceedingly well. The mouse was a most efficient tattler."

"The thing that really burns me," Vickers said, "is that business about making Cliffwood think I had done you in."

"We had to get you out of there and headed back to your childhood haunts."

"How did you know where I'd go?"

FLANDERS said, "My friend, have you ever thought about the ability of hunch? I don't mean the feeble hunch that is used on the racetrack to pick a winner or the hunch about whether it is going to rain or not, but the ability in the fullness of its concept. You might say it is the instinctive ability to assess the result of a given number of factors, to know, without actually thinking the matter out, what is about to happen."

"It's almost like being able to

peek into the future."

"Yes," said Vickers, "I have thought about it. A good deal in the last few days, as a matter of fact."

"You have speculated on it?"

"To some extent. But what has . . ."

"Perhaps," said Flanders, "you have speculated that it might be a human ability that we never developed, that we scarcely knew was there and so never bothered with, or that it might be one of those abilities that it takes a long time to develop, a sort of an ace-in-the-hole ability for mankind's use when he was ready for it or might have need of it."

"I did think that, or at least some of it, but . . ."

"Now's the time we need it," Flanders interrupted again. "And that answers the question that you asked. We hunched you would go back."

"At first I thought Crawford was the one, but he said he wasn't."

Flanders shook his head. "Crawford wouldn't have done it. He needs you too badly. Your hunch on that one wasn't working too hot."

"No, I guess it wasn't."

"Your hunches don't work," said Flanders, "because you don't give them a chance. You still have the world of reason to contend with. You put your reliance

on the old machinelike reasoning that the human race has relied on since it left the caves. You figure out every angle and you balance it against every other angle and you add up and cancel out as if you were doing a problem in arithmetic. You never give hunch a chance. That's the trouble with you."

AND that was the trouble, Vickers thought. He'd had a hunch to spin the top on the porch of the Preston house. If he had done that, he'd have saved himself days of walking through the wilderness of this second world to get to this same spot. He'd had a hunch that he should have paid attention to Crawford's note and not driven the Forever car. If he'd done that, he'd have saved himself a lot of trouble. And there had been the hunch, which he had finally obeyed, that he must get back the top—and that one had paid off.

"How much do you know?" asked Flanders.

"I don't really know," Vickers admitted. "I know there's a mutant organization that had something to do with kicking the human race out of the rut you talked about, that night back in Cliffwood. And the organization has gone underground because its operations were getting too

widespread and too significant to escape attention. You've got factories working, turning out the mutant gadgets you're using to wreck the economy of the old world. I saw one of those. Tell me, do the robots run it or . . ."

Flanders chuckled. "The robots run it. We just tell them what we want."

"Then there's this business of listening to the stars."

"We've gotten many good ideas that way," said Flanders. "Not all of us can do it. Just some of us who are natural telepaths. And as I told you that night we talked, not all the ideas are ones that we can use. Sometimes we just get a hint of some-



thing and we go on from there."

"And where are you headed? Where do you intend to go?"

"That's one that I can't answer. There are new possibilities being added all the time, new directions opening out. We're close to many great discoveries. For one thing, immortality. There is one listener . . ."

"You mean," asked Vickers, "everlasting life?"

"Why not?"

Of course, thought Vickers, why not? If you had everlasting razor blades and everlasting light bulbs, why not everlasting life?

"And androids?" Vickers asked. "Where would an android like myself fit in? Surely, an android can't be too important."

"We have a job for you," said Flanders. "Crawford is your job."

"What do I do with Crawford?"

"You stop him."

"Stop him? Me? Do you know what's back of Crawford?"

"I know what's back of you."

"Tell me," Vickers said.

"The highest, most developed hunch ability that ever has been registered in a human being. The highest ever registered and the most unsuspected, the least used of any we have ever known."

"Wait a minute. You're forget-

ting that I'm not a human being."

"Once you were. You will be again. Before we took your life . . ."

"Took my life!"

"The life essence," said Flanders, "the mind, the thoughts and impressions and reactions that made up Jay Vickers—the real Jay Vickers—aged eighteen. Like pouring water from one vessel to another. We poured you from your body into an android body and we've kept and guarded your body against the day we can pour it back again."

Vickers came half out of his chair.

Flanders waved a hand at him. "Sit down. You were going to ask me why."

"And you're going to answer me," said Vickers.

"Certainly I will answer you. When you were eighteen, you were not aware of the ability you had. There was no way to make you aware of it. It would have done no good to tell you or to attempt to train you. You had to grow into it. We figured it would take fifteen years, but it took more than twenty and you aren't even yet as aware as you should be."

"But I could have . . ."

"Yes," said Flanders, "you could have grown aware of it in your own body, except that there is another factor—*inherent mem-*

ory. Your genes carry the inherent memory factor, another mutation that occurs as infrequently as our telepathic listeners. Before Jay Vickers started fathering children, we wanted him to be entirely aware of his hunch ability."

Vickers remembered how he had speculated on the possibility of inherent memory, while lying on the corn-shuck mattress in the loft of Andrews' house. Inherent memory, memory passed on from father to son. His father had known about inherent memory, so he had guessed it, too. He had known about it, or at least he'd remembered it when the time had come for him to know about it, when he was growing—he groped for the word—aware.

"So that is it," said Vickers. "You want me to put the hunch on Crawford and my children because they will have hunch, too."

FLANDERS nodded. "I think we understand one another."

"Yes," said Vickers. "I am sure we do. First of all, you want me to stop Crawford. That is quite an order. What if I put a price on it?"

"We have a price. A most attractive price. I think it will interest you."

"Try me."

"You asked about Kathleen Preston. You wanted to know if there was such a person and I can tell that there is. How old were you when you knew her, by the way?"

"Eighteen."

Flanders nodded idly. "A very fine age to be." He looked at Vickers. "Don't you agree?"

"It seemed so then."

"You were in love with her."

"Of course."

"And she was in love with you."

"I think so," Vickers said. "I can't be sure, but I think she was."

"You may be assured that she was in love with you."

"You will tell me where she is?"

"No," said Flanders.

"But you . . ."

"When your job is done, you'll go back to eighteen again."

"And that's the price," said Vickers. "That's the pay I get. To be given back a body that was mine to start with. To be eighteen again."

"It is attractive to you?"

"Yes, I guess so," Vickers said. "But don't you see, Flanders, the dream of eighteen is gone. It's not just the physical eighteen—it's the years ahead and the promise of those years and the wild, impractical dreaming and the love that walks beside you

in the spring of life."

"Eighteen," said Flanders. "Eighteen and immortality and Kathleen Preston, herself seventeen again."

"Kathleen?"

Flanders nodded.

"Just as it was before," said Vickers. "But it won't be the same, Flanders. Something that has slipped away."

"Just as it was before," insisted Flanders. "As if all these years had never been."

XXXV

SO he was a mutant, after all, in the guise of android, and once he had stopped Crawford, he'd be an eighteen-year-old mutant in love with a seventeen-year-old mutant and there was just a possibility that, before they died, the listener might pin down immortality. And if that were so, then he and Kathleen would walk enchanted valleys forever and they'd have mutant children and all of them would live a life such as the old pagan gods of Earth might have looked upon with envy.

He threw back the covers and got out of bed and walked to the window. Standing there, he stared down at the moonlit enchanted valley where he'd walked that day of long ago and he saw that the valley was an empty

place and would stay empty no matter what he did.

He had carried the dream for more than twenty years and now that the dream was coming true, he saw that it was tarnished with all the time between, that there was no going back to that day in 1956, that a man never can go back to a thing he once has left.

You could not wipe out the years of living, pile them neatly in a corner and walk away and leave them. They could be erased from your mind and they would be forgotten, but not forever, and the day would come when they'd break through again. And once they'd found you out, you'd know that you had lived not one lie, but two.

That was the trouble, you couldn't hide away the past.

The door creaked open and Vickers turned around.

Hezekiah stood in the doorway, the dim light from the landing sparkling on his metal hide.

"You cannot sleep?" asked Hezekiah. "Perhaps there's something I can do. A sleeping powder, perhaps, or . . ."

"There is something you can do," said Vickers. "There's a record that I want to see."

"A record, sir?"

"My family record. You must have it here somewhere."

"In the files, sir. I can get it

right away, if you will wait."

"And the Preston file as well," added Vickers. "The Preston family record."

"Yes, sir," said Hezekiah. "It will take a moment."

VICKERS turned on the light and sat down on the edge of the bed and he knew what he had to do.

The enchanted valley was an empty place. The moonlight shattering on the whiteness of the pillar was a memory without life or color. The rose-scent upon the long-gone night of June had blown away with the wind of yesteryear.

"Ann," he said, "I've been a fool too long. What about it, Ann? We've bantered and quarreled and we've used the bantering and the quarreling to cover the love that both of us have held. If it hadn't been for me and my dreaming of a valley, the dream growing cold and my never knowing it, we would have known long ago the way it was with us."

They took from us, he thought, the birthright that was ours of living out our lives in the bodies in which we first knew the world. They've made of us neither man nor woman, but something that passes for a man and woman and we walk through the streets of life like shadows flickering

down the wall. And now they would take from us the dignity of death and the realization that our task was done and they make us live a lie—I an android powered by the life-force of a man that is not myself, and you alive with a life that is not your own.

"To hell with them," he said. "To hell with all this double living, with this being a manufactured mutant."

He'd go back to Earth and find Ann Carter and he'd tell her that he loved her, not as one loved a moonlight - and - roses memory, but as a man and woman love. Together, they would live out what was left to them of life. He would write his books and she would go on with her work and they'd forget, as best they could, this matter of the mutants.

He listened to the little murmurings of a house at night, unnoticed in the daytime when it is filled with human sounds. And he thought the record would not tell the tale that he wished to know, would not tell all the truth that he hoped to find, but it would tell him who he'd been and something about that tattered farmer and his wife who had been his father and his mother.

THE door opened and Hezekiah pattered in, with a folder tucked beneath his arm. He

handed the folder to Vickers and stood to one side, waiting.

Vickers opened it with trembling fingers and it was there upon the page.

Vickers, Jay, b. Aug. 5, 1937, l.t. June 20, 1956, h.a., t., i.m., lat.

He studied the line and it made no sense.

"Hezekiah."

"Yes, sir?"

"What does all this mean?"

"To what do you refer, sir?"

"This line here," said Vickers, pointing. "This l.t. business and the rest of it."

Hezekiah bent and translated: "Jay Vickers, born August 5, 1937, life transferred June 20, 1956, hunch ability, time sense, inherent memory, latent mutation. Meaning, sir, that you are unaware."

"Thank you," said Vickers.

"A pleasure, sir."

He glanced at the line above and there he found the names, placed on the bracketed lines that indicated marriage, from which the line bearing his own name sprouted.

Charles Vickers, b. Jan. 10, 1907, cont. Aug. 8, 1928, aw., t., el., i.m., s.a. Feb. 6, 1961.

Sarah Graham, b. Apr. 16, 1910, cont. Sept. 12, 1927, aw., ind. comm., t., i.m., s.a. Mar. 9, 1960.

His parents. Two paragraphs

of symbols. He tried to make it out.

"Charles Vickers, born January 10, 1907, continued? No, that wouldn't be right . . ."

"Contacted, sir," said Hezekiah.

"Contacted August 8, 1928, aware, t., el. What's that?"

"Time sense and electronics, sir."

"Time sense?"

"The other worlds. They are a matter of time, you know."

"No, I didn't know. Would you explain it, please?"

"There is no time," said Hezekiah. "Not as the normal human thinks of time, that is. Not a continuous flow of time, but brackets of time, one second following behind the other. Although there are no seconds, no such things as seconds, no such measurement, of course."

"That's right," said Vickers. It all came back to him, the explanation of those other worlds, the following worlds, each one encapsulated in a moment of time, in some strange and arbitrary division of time, each time bracket with its own world, how far back, how far ahead, no one could know or guess.

SOMEWHERE inside him, the secret trigger had been tripped and the inherent memory was his, as it always had been his,

but hidden in his unawareness, as his hunch ability still was.

There was no time, Hezekiah had said. No such thing as time in the terms of normal human thought. Time was bracketed and each of its brackets contained a single phase of a universe so vastly beyond human comprehension that it brought a man up short against the impossibility of envisioning it.

And time itself? Time was a never-ending medium that stretched into the future and the past—except there was no future and no past, but an infinite number of brackets, extending either way, each bracket enclosing its single phase of the Universe.

Back on Man's original Earth, there had been speculation on traveling in time, of going back into yesterday or forward into tomorrow. And now he knew that you could not do it, that the same instant of time remained forever within each bracket, that Man's Earth had ridden the same bubble of the single instant from the time of its genesis and that it would die and come to nothing within that self-same instant.

You could travel in time, but there would be no yesterday and no tomorrow. If you held a certain time sense, you could break out from one bracket to another, and when you did, you would not find yesterday or tomorrow,

but another world.

And that was what he had done when he had spun the top, except, of course, that the top had had nothing to do with it. It had simply been an aid.

He went on with the line.

"What is s.a., Hezekiah?"

"Suspended animation, sir."

"My father and my mother?"

"Waiting for the day when the mutants finally achieve immortality."

"But they died, Hezekiah!"

"They would have died if they had been allowed to live. When there is that danger, mutants are kept in suspended animation until immortality becomes possible."

The room was bright and cold and naked with the monstrous nakedness of truth.

His mother and his father waited in suspended animation for the day they could have immortality!

And he, Jay Vickers, the real Jay Vickers, what of him? Not suspended animation, certainly, for the life was gone from the real Jay Vickers and was in this android body that sat in this room holding the family record in two android hands.

"Kathleen Preston?" Vickers asked.

Hezekiah shook his head. "I do not know about her, sir."

"But you got the Preston

family record!"

Hezekiah shook his head again. "I searched the cross-index, sir. There is no Preston mentioned. No Preston anywhere."

XXXVI

HE had made a decision and now the decision was no good—made impossible by the memory of two faces. He closed his eyes and remembered his mother, every feature, a little idealized, perhaps, but mainly true, and he recalled how she had been horrified by his adventure into fairyland and how Pa talked to him and how the top had disappeared.

Of course the top had disappeared. Of course he had been lectured about too much imagination. After all, they probably had a hard enough time keeping an eye on him and knowing where he was without his wandering into other worlds. An eight-year-old would be hard enough to keep track of on one world, let alone all the others.

The memory of his mother's face and of his father's hand upon his shoulder, with the fingers digging into his flesh with a manly tenderness—these were things no one could turn his back upon.

In utter faith they waited, knowing that when the blackness came upon them, it would not

be the end, but the beginning of an even greater adventure in living than they had hoped when they banded themselves with the little group of mutants so many years before.

If they held such faith in the mutant plan, could his be any less?

Could he refuse to do his part toward the establishment of that world for which they had done so much?

They themselves had given what they could. The labor they had expended, the faith they had lavished must now be brought to realization by the ones they had left behind. He was one of those—and he knew he could not fail them.

What kind of world? He thought he knew.

An immortal world that had all the factors necessary to make immortality workable—endless economic living room, endless opportunity, endless challenges to the best efforts of one's being.

Endless living room there was, even if one took only Earth into account, for there now lay open to Man's possession that endless ring around the Sun.

But there also would be the Galaxy, with all its solar systems, and each of these solar systems would have its following worlds as well. Take all the planets that there were and mul-

tiply them by infinity and you got a rough idea.

Each world would be an opportunity and new techniques and new sciences would add to opportunity, so that Man, even eternal Man, need never fear the lack of opportunity or of challenge.

ONCE you had immortality, what did you use it for?

You used it to keep up your strength. Even if your tribe were small, even if the birth rate were not large, even if new members of the tribe were discovered but infrequently, you still would be sure of growth if no one ever died.

You used it to conserve ability and knowledge. If no one ever died, you could count on the ultimate strength and knowledge and ability of each member of the tribe. When a man died, his ability died with him and, to some extent, his knowledge. Yet it wasn't only that. You lost not only his present ability and knowledge, but all his future ability and knowledge.

What knowledge, Vickers wondered, did the Earth now lack because certain persons died a dozen years too soon? Some of the knowledge, of course, would be recovered through the later work of others, but certainly there was much that could never

be recovered, ideas that would not be dreamed again, concepts that were blotted out forever by the death of a brain in which the first faint stirring of their development had just begun to ferment.

Within an immortal society, such a thing could never happen. An immortal society would be certain of total ability and total knowledge of its manpower.

Take the ability to tap the knowledge of the stars, take inherent memory, the technical knowledge that made everlasting merchandise and add immortality.

That was the formula—of what? Of the ultimate in life? Of the pinnacle of intellect? Of godhood itself?

Go back a hundred thousand years. Consider the creature, Man. Give him fire, the wheel, the bow and arrow, domesticated animals and plants, plus tribal organization and the first, faint dawning concept of Man as the lord of Earth. Take that formula and what did you have?

The beginning of civilization, the foundation of a human culture.

The formula of the mutants, he knew, was simply another step upward as the fire-wheel-dog formula of a hundred thousand years before had been an earlier forward step.

The mutant formula was not the end result of human effort nor of human intellect and knowledge; it was but a step. Within the human mind still dwelled the possibility of even greater steps, but what the concepts of those steps might be was as inconceivable to him as the time structure of the following worlds would have been to the man who discovered fire or tamed the dog.

WE still are savages, he thought. We still crouch within our cave, staring out beyond the smoky fire that guards the entrance of our cave against the illimitable darkness that lies upon the world.

Someday we'll plumb that darkness, but not yet.

Immortality would be a tool that might help us plumb that darkness and that is all it is, a simple, ordinary tool.

What was the darkness out beyond the cave's mouth?

Man's ignorance of what he was or why he was or how he

came to be and what his purpose and his end. The old, eternal questions.

Perhaps with the tool of immortality Man could track down these questions, could gain an understanding of the orderly progression and the awful logic which fashioned and moved the Universe of matter and of energy.

The next step might be a spiritual one, the finding and understanding of a divine pattern that was law unto the entire Universe. Might Man find at last, in all humility, a universal God—the Deity that men now worshiped with the faintness of human understanding and the strength of human faith? Would Man find at last the concept of divinity that would fill, without question and without quibble, Man's terrible need of faith, so clear and unmistakable that there could be no question and no doubt; a concept of goodness and of love with which Man could so identify himself that there would then be no need of

I'VE GOT THEM ALL!!—EVERY ONE!!

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FRANK A. SCHMID

42 Sherwood Avenue

Franklin Square, L. I., N. Y.

faith, but faith replaced with knowing and an everlasting sureness?

And if Man outlawed death, he thought, if the doorway of death is closed against the final revelation and the resurrection, then surely Man must find such a concept or wander forever amid the galaxies a lost and crying thing.

"Hezekiah," said Jay Vickers, "you are sure?"

"Of what, sir?"

"About the Prestons. You are sure there are none?"

"Positive, sir. None whatever."

"There was a Kathleen Preston," Vickers said. "I am sure there was."

But how could he be so sure?

For one thing, he remembered her. For another, Flanders said there was no such a person.

But his memory could be conditioned and so could Flanders'.

Kathleen Preston could be no more than an emotional factor designed to bind him to this house, a keyed-in response that would not let him forget, no matter where he went or what he might become, this house and the ties it held for him.

"Hezekiah, who is Horton Flanders?" Vickers asked.

"Horton Flanders," said the robot, "is an android, just the same as you."

—CLIFFORD D. SIMAK

CONCLUDED NEXT MONTH

FORECAST

Next month, Clifford D. Simak's *RING AROUND THE SUN* ends in a flare of brilliant ingenuity that will probably leave a permanent after-image on your mental retina. One question you may find yourself pondering: If you're not yourself, who is?

Damon Knight returns with *FOUR IN ONE*, which is startling enough to excuse his long absence. Its premise seems harmless—a scientist becomes absorbed in his work—but wait till you see what Knight does with that simple fact!

WATCHBIRD by Robert Sheckley solves a problem as old as Cain. Strange, though, how getting rid of one problem often creates another, usually worse than the first.

Short stories? Willy Ley? Our regular features? Of course!



THOUGHTS HAVE WINGS

You Can Influence Others With Your Thinking!

TRY it some time. Concentrate intently upon another person seated in a room with you, without his noticing it. Observe him gradually become restless and finally turn and look in your direction. Simple—yet it is a positive demonstration that thought generates a mental energy which can be projected from your mind to the consciousness of another. Do you realize how much of your success and happiness in life depend upon your influencing others? Is it not important to you to have others understand your point of view—to be receptive to your proposals?

Demonstrable Facts

How many times have you wished there were some way you could impress another favorably—get *across to him or her* your ideas? That thoughts can be transmitted, received, and understood by others is now scientifically demonstrable. The tales of miraculous accomplishments of mind by the ancients are now known to be fact—not fable. The method whereby these things can be intentionally, not accidentally, accomplished has been a secret long cherished by the Rosicrucians—one of

the schools of ancient wisdom existing throughout the world. To thousands everywhere, for centuries, the Rosicrucians have privately taught this nearly-lost art of the practical use of mind power.

This Free Book Points Out the Way

The Rosicrucians (not a religious organization) invite you to explore the powers of your mind. Their sensible, simple suggestions have caused intelligent men and women to soar to new heights of accomplishment. They will show you how to use your natural forces and talents to do things you now think are beyond your ability. Send for a copy of the fascinating sealed free book, "The Mastery of Life," which explains how you may receive this unique wisdom and benefit by its application to your daily affairs. Address your request to: Scribe: O.H.Y.

The Rosicrucians
(AMORC)
SAN JOSE, CALIFORNIA, U.S.A.

SEEDS OF LIFE

By JOHN TAINÉ

"SEEDS OF LIFE is Science fiction of a high order, a novel involving believable people in unusual situations.

THOUGHT of the atomic bomb and what exposure to its radiations might do has excited the imagination of thinking men and women everywhere.

"John Taine" (who is Dr. E. T. Bell of the California Institute of Technology) has permitted his imagination to investigate some of the possibilities in a similar fascinating theme. This is not a story involving the atomic bomb, however. Atomic energy is part of the story, but only an incidental part, as are such unlikely ingredients as a black widow spider, a two-million volt X-ray tube, chicken eggs which hatch out reptilian monsters, and other equally strange plot threads. Dr. Bell has again displayed his usual ability to write about the unusual.

When Dr. Andrew Crane of the Erickson Foundation tries to make a man of Neils Bork, his laboratory assistant, he succeeds in a spectacular manner. Bork himself contributes to the end result in his bumbling way, and there emerges Miguel De Soto, a superman in every sense of the word. His rate of thinking and perceiving has accelerated many thousand times beyond that of any human being who has ever lived. He is a partial, accidental anticipation of the race man may be destined to become in the millenniums ahead.

SEEDS OF LIFE is written in the smoothly entertaining style which characterizes all of Dr. Bell's work, including such well-known books as "The Magic Numbers," "The Forbidden Garden," "The Iron Star," "Before the Dawn," "Mathematics, Queen and Servant of Science," and his many "John Taine" science novels. And it is adult reading fare, realistic, gripping and informative. Above all it is good entertainment.

AT YOUR NEWSSTAND

JANUARY 6th